Agenția Națională pentru Sănătatea Publică

CERTIFICAT
DE ÎNREGISTRARE DE STAT/AVIZARE SANITARĂ AL PRODUSULUI BIOCID

Nr. **00183** data/luna/anul **05.03.2021**

Solicitant: For titular **SC"Endo –Chirurgie" SRL**

Adresa juridică: ***str. Meșterul Manole, 9 mun. Chișinău, Republica Moldova***
Nr. de identificare de stat – codul fiscal 1009600033242

În conformitate cu HG nr. 344 din 10.06.20 și în baza ordinului ANSP **nr. 34 din 02.03.2021**
(nr., data/luna/anul)

emis în baza documentației înaintate, s-a decis că următorul produs biocid poate fi fabricat sau **comercializat și utilizat** în Republica Moldova, conform prevederilor legislației în vigoare.

Denumirea comercială a produsului: Desderman®pure

1. Date de identificare ale produsului:
1.1 Categoria de produs: **biocid**
- *Grupa principală:* **1**
- *Tip de produs:* **1**

1.2Utilizare: Dezinfectarea igienică și chirurgicală a mâinilor

1.3 Forma de condiționare și ambalare: **Lichid, ambalaj – flacoane/canistre polimer, de 60 ml, 100 ml, 150 ml, 500ml, 1l, 5l.**
1.4 Conținut în substanțe active: Etanol 96%- 78,20%
bifenil -2 –ol -0,10%
1.5 Categorii de utilizatori: **Profesionali, industrial**
1.6 Informații privind reglementările aplicabile: **HG nr. 344 din 10.06.2020,**
2. Date de identificare ale producătorului:
2.1 Firma: **„SchUlke&Mayr GmbH", Germania**
2.2 Adresa: **22840 Norderstedt, Germania**

Valabilitatea certificatului de înregistrare data/luna/anul **05.03.2028**
Compoziția, parametrii de calitate ai produsului și domeniul de utilizare sunt cei prevăzuți în documentația tehnică, care a stat la baza eliberării prezentului certificat, conform Raportului de evaluare nr. **170** din **25.02.2021**

Orice modificare a datelor de identificare a produsului biocid, duce în mod automat la anularea certificatului de înregistrare.

Director interimar **Vasile GUȘTIUC**

MINISTERUL SĂNĂTĂŢII AL REPUBLICII MOLDOVA

AGENȚIA NAȚIONALĂ PENTRU SĂNĂTATE PUBLICĂ

MD 2028, mun. Chişinău, str. Gh. Asachi 67A, Tel. +373 22 574 501, https://ansp.md e-mail: office@ansp.gov.md IDNO:1018601000021

CERTIFICAT
DE ÎNREGISTRARE DE STAT

Nr.	P-0069/2023
din	27.12.2022

I. Denumirea comercială a produsului în Republica Moldova	
Chloramix DT	
II. Date de identificare ale solicitantului (numele, adresa, ţara)	
ENDO-CHIRURGIE S.R.L., Republica Moldova, mun. Chişinău, sec. Centru, str. Drumul Viilor, 30, bloc. 2, ap./of. 54	
III. Date de identificare a producătorului (numele, adresa, ţara)	
Schulke Cz, s.r.o., Lidicka 445, 735 81, Bohumin, Czech republic	
IV. Date de identificare a produsului	
1. Categoria de produs	biodistructiv
1.1. Grupa principală	1
1.2. Tip de produs	2, 4

În conformitate cu Hotărârea Guvernului nr. 344 din 10.06.20 şi în baza ordinului ANSP nr. 285 din 26.12.2022 emis în baza documentației înaintate, s-a decis că următorul produs biocid poate fi fabricat sau **comercializat şi utilizat** în Republica Moldova, conform prevederilor legislaţiei în vigoare.

Certificatul de înregistrare este valabil până la data: 27.12.2027.

Orice modificare a datelor de identificare a produsului biocid, duce în mod automat la anularea certificatului de înregistrare.

Anexa: 1 pagini

Director

Digitally signed by Jelamschi Nicolae
Date: 2023.11.02 10:43:53 EET
Reason: MoldSign Signature
Location: Moldova

Nicolae Jelamschi

Anexa
la certificatul nr. P-0069/2023 din 27.12.2022 pentru înregistrare de stat a produsului biocid

I. Denumirea comercială a produsului în Republica Moldova

Chloramix DT

V. Date privind substanța(ele) activă(e) a produsului

Denumirea chimică(IUPAC, ISO sau alte)	*Nr. CE*	*Nr. CAS*	*Cantitatea de produs*
Natrium dichlorisocyanurate, dihydrate			75g.

VI. Forma de condiționare

tablete

VII. Modul de ambalare (tipul, capacitatea)

ambalaj 1kg

VIII. Domeniul și aria de utilizare

1. Domeniul de utilizare	Dezinfectant care nu este destinat aplicării directe la oameni sau animale.
2. Aria de aplicare	Dezinfecția suprafețelor în domeniul medical. Dezinfecția suprafețelor, utilajelor din domeniul public și industriei.

IX. Eficacitatea

Activitatea	*Metoda de testare/protocolul de testare*	*Specia/tulpina*	*Concentrații*	*Timp de acțiune*
Bactericidă	CSN EN 13727 CSN EN 1276	Escherichia coli, Pseudomonas aeruginosa, Staphylococcus aureus, Enterococcus hirae	1 tab/5L	15 min
Bactericidă	CSN EN 13697	Escherichia coli, Pseudomonas aeruginosa, Staphylococcus aureus, Enterococcus hirae, Candida albicans, Aspergillus niger.	1 tab/5L; 1 tab/10L	15 min
Bactericidă	EN 16615	Pseudomonas aeruginosa, Staphylococcus aureus, Enterococcus hirae	2 tab/3L	5min
Fungicidă	CSN EN 13624, CSN EN 1650	Candida albicans, Aspergilus niger	1tab/5L; 1tab/3L	15 min
Fungicidă	EN 13697	Candida albicans, Aspergillus niger		15min
Levuricidă	EN 13624	Candida	1tab/5L	15 min

		albicans, Aspergillus brasiliensis		
Levuricidă	EN 13697		1 tab/5L; 10L	15min
Levuricidă	EN 16615	Candida albicans	2 tab/3L	5min
Micobactericidă/Tuberculocidă	CSN EN 14348 CSNNN EN 14204	Mycobacterium terrae, Mycobacterium avium	1 tab/3L; 1tab/1,5L	15 min, 30 min
Sporicidă	CSN EN 13 704	Bacillus subtilis	5 tab/1,5L	15 min
Sporicidă	EN 17126	Clostridium difficile, Bacillius subtilis, Bacillus cereus	1tab/1,5L	15 mi, 30 min, 60 min
Sporicidă	EN 17126	Clostridium difficile	1tab/1,5L	15min, 30 min, 60 min
Virucidă	CSN EN 14476	Poliovirus type1,Adenovirus type 5	1tab/1,5L; 1tab/5L	15 min
Virucidă	EN 16777+A2:2018	Adenovirus type 5, Murine norovirus	1tab/1,5L	15 min
Virucidă	SOP-M-19-00-H	BVDV strain NADL ATCC-VR-534	1tab/1,5L	15 min
Virucidă	CSN EN 16777:2020	Adenovirus type 5	2 tab/1L	15 min
Virucidă	EN 14476	Murine norovirus	1tab/1,5L; 1tab/5L	15 min
Virucidă	EN 14476+A1	Adenovirus type 5	1tab/1,5L; 1tab/7L; 1tab/10L	15 min, 30 min, 60 min

X. Indicații de utilizare

Metoda de aplicare	*Concentrația soluției de lucru*	*Timpul de acțiune*
dezinfectarea prin stergere, imersie		

XI. Etichetarea produsului biocid

Simboluri și indicarea pericolelor	Atenție.
Fraze de risc (R) și/sau Pictograme de pericol (H)	H319; H 339; H410
Fraze de prudență (S) și/sau Fraze de precauție (P)	P273; P280

XII. Categoria de utilizatori

Profesionali,

XIII. Recomandări/restricții privind protecția sănătății și a factorilor de mediu

Utilizarea conform instrucțiunii de utilizare a produsului.

Agenţia Naţională pentru Sănătatea Publică

CERTIFICAT
DE ÎNREGISTRARE DE STAT/AVIZARE SANITARĂ
AL PRODUSULUI BIOCID

Nr. **00141** data/luna/anul **29.12.2020**

Solicitant: For titular **SC"Endo –Chirurgie" SRL**

Adresa juridică: ***str. Meşterul Manole, 9 mun. Chişinău, Republica Moldova***
Nr. de identificare de stat – codul fiscal 1009600033242

În conformitate cu HG nr. 564 din 10.09.09 şi în baza ordinului ANSP **nr.182 din 24.12.2020**
(nr., data/luna/anul)

emis în baza documentaţiei înaintate, s-a decis că următorul produs biocid poate fi fabricat sau **comercializat şi utilizat** în Republica Moldova, conform prevederilor legislaţiei în vigoare.

Denumirea comercială a produsului: Desderman®care

1. Date de identificare ale produsului:
1.1 Categoria de produs: **biocid**
- *Grupa principală:* **1**
- *Tip de produs:* **1**

1.2Utilizare: Dezinfectarea igienică şi chirurgicală a mâinilor

1.3 Forma de condiţionare şi ambalare: gel, **ambalaj – flacoane/canistre polimer, de 60 ml, 100 ml, 150 ml, 500ml, 1l, 5l.**
1.4 Conţinut în substanţe active: Etanol 96% – 80 -90 %

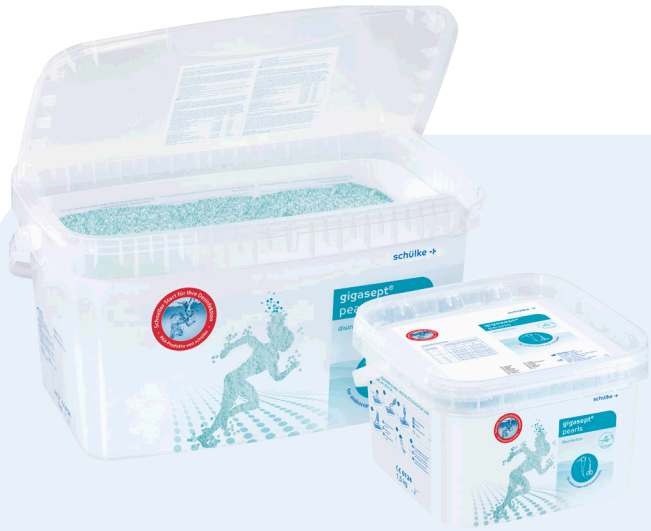
1.5 Categorii de utilizatori: **Profesionali, industrial**
1.6 Informaţii privind reglementările aplicabile: **HG nr. 564 din 10.09.2009,**
2. Date de identificare ale producătorului:
2.1 Firma: **„SchUlke&Mayr GmbH", Germania**
2.2 Adresa: **22840 Norderstedt, Germania**

Valabilitatea certificatului de înregistrare data/luna/anul **29.12.2025**
Compoziţia, parametrii de calitate ai produsului şi domeniul de utilizare sunt cei prevăzuţi în documentaţia tehnică, care a stat la baza eliberării prezentului certificat, conform Raportului de evaluare nr. **128** din **16.12.2020**

Orice modificare a datelor de identificare a produsului biocid, duce în mod automat la anularea certificatului de înregistrare.

Director interimar **Vasile GUŞTIUC**

schülke



Active oxygen-based disinfectant for manual cleaning and disinfection of medical devices.

gigasept® pearls

Our Plus:

- fast and broad microbiological efficacy through a synergistic combination of active substances with active oxygen (virucidal disinfection with 2 % in 10 minutes)
- outstanding cleaning performance due to a multi-enzyme formula (protease, lipase and amylase) in combination with a neutral pH (non-protein-fixing) and potent surfactants
- very good material compatibility even with sensitive materials such as flexible endoscopes
- more user safety – thanks to the special pearl structure – dustfree (no risk of inhalation)
- pleasant, fresh smell

Application areas

For manual prophylactic or final disinfection and cleaning of non-invasive and invasive instruments (thermostable, thermolabile) as well as medical devices that can be reprocessed using an immersion bath. Very suitable for the reprocessing of flexible endoscopes and sensitive materials such as silicone, polycarbonate, polysulfone and acrylic glass. The pH of gigasept® pearls can be buffered into a neutral range by adding special additives. This prevents protein coagulation (fixation of proteins to surfaces) and also achieves optimal material compatibility. In addition to manual reprocessing, gigasept® pearls are also suitable for use in ultrasonic baths.

Instructions for use

gigasept® pearls are dissolved in cold water (10 °C - 25 °C, at least drinking water quality) and diluted to the desired application concentration.
Dosage: 1.0 % - 2.0 %, depending on microbiological efficacy. The solution is prepared using the enclosed dosing aid. Clean off any visible contamination from instruments / medical devices before disinfection and then rinse, preferably with demineralised water.
Application example: 10 litres of a 2 % working solution corresponds to 9.8 litres of water and 200 g (200 g = 300 ml) of gigasept® pearls.
Add water and stir several times during the first 15 minutes after sprinkling in the appropriate amount of gigasept® pearls. After this activation time, the working solution is ready to use. Minor, undissolved residue does not affect the efficacy of the working solution, but is an additional activity deposit. Place instruments / medical devices in the working solution immediately after use. Ensure complete wetting, especially of hollow instruments / medical devices, and allow it to take effect. After reprocessing, rinse the instruments / medical devices thoroughly, preferably with demineralised water, to completely remove residue of the working solution.
The reprocessing recommendations of the respective instrument / medical device manufacturers must be complied with. Do not mix with cleaners or other disinfectants. National regulations may require that cleaning and disinfection are carried out in two separate process steps.
Standing time: Renew the working solution every work day and if there is visible contamination.

Microbiological efficacy

Efficacy	Concentration	Contact time
bactericidal *EN 13727, EN 14561,* *in accordance with VAH* *- dirty conditions*	2 % (20 g/l) 1 % (10 g/l)	5 min. 10 min.
yeasticidal *EN 13624, EN 14562,* *in accordance with VAH* *- dirty conditions*	2 % (20 g/l) 1 % (10 g/l)	5 min. 10 min.
mycobactericidal *EN 14348, EN 14563,* *in accordance with VAH* *- dirty conditions*	2 % (20 g/l)	10 min.

gigasept® pearls

tuberculocidal *EN 14348, EN 14563* *- dirty conditions*	2 % (20 g/l) 1 % (10 g/l)	5 min. 10 min.
tuberculocidal *in accordance with VAH* *- dirty conditions*	2 % (20 g/l) 1 % (10 g/l)	5 min. 15 min.
virucidal *in accordance with DVV (German Registered Association for Combating Viral Diseases)/RKI Guideline*	2 % (20 g/l) 1 % (10 g/l)	10 min. 30 min.
virucidal *EN 14476, EN 17111* *- dirty conditions*	2 % (20 g/l) 1 % (10 g/l)	10 min. 60 min.
sporicidal *EN 17126* *- dirty conditions*	1 % (10 g/l)	10 min.
sporicidal *C. difficile* *EN 17126* *- dirty conditions*	1 % (10 g/l)	5 min.
fungicidal *EN 13624, EN 14562* *- dirty conditions*	2 % (20 g/l)	30 min.
fungicidal *EN 13624, EN 14562* *- clean conditions*	2 % (20 g/l) 1 % (10 g/l)	15 min. 60 min.

CE 0124

Product data

Composition:
100 g of gigasept® pearls contain the following active substances: 43.0 g sodium percarbonate, 22.0 g tetraacetylethylenediamine.
Labelling according to Regulation (EC) No. 648/2004:
> 30 % oxygen-based bleach, < 5 % non-ionic surfactants, < 5 % phosphates,< 5 % EDTA, enzymes, perfumes.

Chemical-physical data

Color	light blue
Flash point	not applicable
Form	granular
pH	ca. 8 / 20 g/l / 20 °C / in water
Viscosity, dynamic	not applicable

Special advice

Always read the label and product information before use.
gigasept® pearls are intended for use by professional personnel in the medical field, e. g. in clinics, private practices.
All serious incidents related to the device shall be reported by the user / patient to the manufacturer and to the competent authority of the state in which the user / patient is established.
Do not use on instruments / medical devices with copper or brass surfaces or damaged chrome-plated and nickel-plated surfaces. Do not use for final disinfection of critical instruments / medical devices.
Carryover of small amounts of application solution from the precleaning is not expected to involve interactions with cleaning agents and disinfection agents from automated endoscope reprocessing (e. g. glutaraldehyde and peracetic acid base).
Slight color variations of the gigasept® pearls do not affect the product quality. The working solution can be disposed of via wastewater. Always close containers tightly and store in a dry and cool place, protected from light. Protect package contents from moisture.

Information for order

Item	Delivery form	Item no.
gigasept® pearls 1,5 kg EM	4 / carton	on request
gigasept® pearls 6 kg EM	1 / carton	on request

These products are not available in every country. For more information please contact our local subsidiary or distributor.

Environmental information

schülke manufactures products economically and with advanced, safe and environmentally friendly production processes while at the same time maintaining out high quality standards.

Expert opinion and information

Please visit our website for an overview of all available literature / reports on the product: http://www.schuelke.com
For individual questions:
Application Department
Phone: +49 40 52100-666
E-mail: info@schuelke.com

EMAS GEPRÜFTES UMWELTMANAGEMENT REG.-NR. D-150-00003

Schülke & Mayr GmbH holds a Manufacturer's Authorisation according to sect 13 para 1 German Drug Law and Certificates of GMP Compliance for medicinal products

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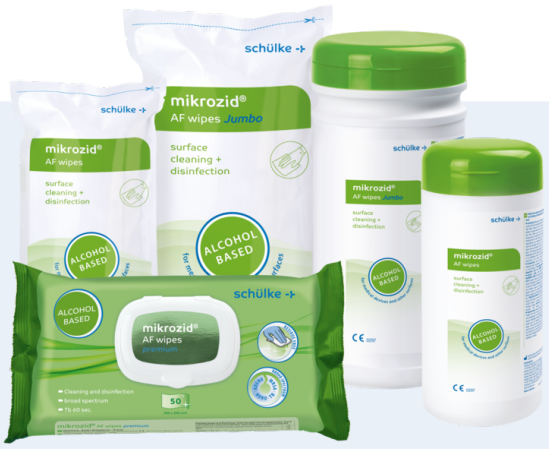
schülke



Alcohol-based, rapid disinfection of non-invasive medical devices and surfaces.

mikrozid® AF wipes

Our Plus

- broad efficacy within very short time
- leaves no streaks
- ready to use

Application areas

The product is suitable for disinfecting medical devices and other surfaces (PT2). Our classic product among the rapid disinfectant products is suitable for disinfecting near-patient surfaces with an increased risk of infection that require short exposure times.

Instructions for use

Thoroughly wipe the surface with the cloth and allow the active ingredient solution taking effect. Ensure complete wetting and maintain the surface moist during the entire exposure time. Ensure that all visible dirt is removed before disinfection. Treat only small areas. The wiping area depends on the room temperature and the structure of the surfaces to be disinfected. Pay attention to hygienic aspects when opening and threading the first cloth. Make sure to close the lid after use.

Refilling the box

Disinfect your hands first and put on a fresh pair of protective gloves and a gown. Ensure that the gloves are not contaminated by other activities during the filling process. Transfer the sticker with the expiry date to the dispenser box. Unscrew the lid, place the refill bag completely in the dispenser box (if necessary, shape it to fit beforehand) and cut off the edge of the bag. Pull the pre-plucked cloth from the middle of the roll, thread it from below into the guide slot provided in the cover and pull it through. Disinfect the lid and screw it on. For high-risk areas, schülke recommends not using refill bags.

Microbiological efficacy

Efficacy	Concentration	Contact time
bactericidal *EN13727, EN16615* *- dirty conditions*	ready-to-use	1 min.
tuberculocidal *EN14348* *- dirty conditions*	ready-to-use	1 min.
yeasticidal *EN13624, EN16615* *- dirty conditions*	ready-to-use	1 min.
virucidal against enveloped viruses *EN14476* *- dirty conditions*	ready-to-use	30 sec.
limited spectrum virucidal activity *EN14476* *- dirty conditions*	ready-to-use	30 sec.
Polyoma SV40 *in accordance with DVV (German Registered Association for Combating Viral Diseases)//RKI Guideline*	ready-to-use	5 min.
Rotavirus *in accordance with DVV (German Registered Association for Combating Viral Diseases)//RKI Guideline*	ready-to-use	30 sec.

Certificates

- IHO listed
- ÖGHMP certificate
- VAH certificate

EURO NORM CE 0297

mikrozid® AF wipes

Product data

Composition:
100 g solution contains the following active substances:
24,75 g Ethanol (94 %), 35 g Propan-1-ol

Chemical-physical data	
Color	colourless
Density	approx. 0,89 g/cm3 / 20 °C / of the active solution
Flash point	27 °C / Method : DIN 51755 Part 1 / of the active solution
Form	Aqueous, alcohol containing solution on non-woven
pH	Not applicable
Viscosity, dynamic	No data available

Special advice

Use disinfectants safely. Always read the label and product information before use.
The product has good material compatibility with metals and plastics (except acrylic glass and alcohol-sensitive paints). Surfaces that are particularly sensitive to alcohol, such as acrylic glass, must not be treated. When using alcoholic disinfectants, please observe the fire and explosion protection in accordance with the trade association regulation "Disinfection Work in Health Care". Keep away from heat and sources of ignition. Wearing protective gloves is advised. Further information is available on request. If handled properly, schülke guarantees a shelf life of 3 months after the package has been opened. **For professional use only.** Any serious incidents related to the product are to be reported to the manufacturer and competent authority. Not for final disinfection of semicritical and critical medical devices!

Information for order

Item	Delivery form	Item no.
mikrozid® AF wipes Refill (150)	20/Carton	on request
mikrozid® AF wipes premium softpack (50)	12/Carton	on request
mikrozid® AF wipes Jumbo Refill (220)	12/Carton	on request
mikrozid® AF wipes tub (150)	10/Carton	on request
mikrozid® AF wipes Jumbo tub (220)	10/Carton	on request

These products are not available in every country. For more information please contact our local subsidiary or distributor.

Application aids

Application aids	Item no.
wall bracket Jumbo tub	134421
Wall mounting for the dispenser (small)	134417

Related Products

- mikrozid® PAA wipes
- mikrozid® sensitive wipes
- mikrozid® universal wipes premium

Environmental information

schülke manufactures products economically and with advanced, safe and environmentally friendly production processes while at the same time maintaining out high quality standards.

Expert opinion and information

Please visit our website for an overview of all available literature/reports on the product: www.schuelke.com.
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Schülke & Mayr GmbH holds a Manufacturer's Authorisation according to sect 13 para 1 German Drug Law and Certificates of GMP Compliance for medicinal products.

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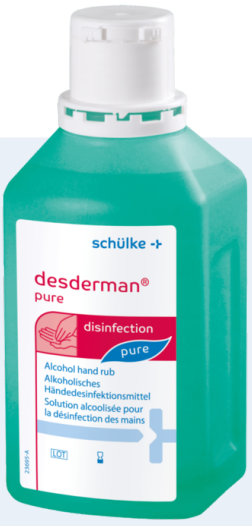
schülke



desderman® pure

Alcohol-based hand rub for hygienic and surgical hand disinfection, without colour and perfume

Our Plus

- all-season product: protects safely against infections all year round!
- broad spectrum of efficacy (incl. viruses according EN 14476)
- excellent skin compatibility due to an established system of refattening agents

Application areas

- **hygienic hand disinfection (EN 13727 + EN 1500):**
  Rub a sufficient amount into dry hands, contact time 30 sec.
- **surgical hand disinfection (EN 13727 + EN 12791):**
  Rub a sufficient amount into dry hands and forearms, contact time 90 sec.

Instructions for use

The product is to be used undiluted. During the contact time for hygienic and surgical hand disinfection, the product should be applied in portions so that the hands or hands and forearms remain well moistened during the entire application time.

Microbiological efficacy

Efficacy	Concentration	Contact time
bactericidal *EN13727*	ready-to-use	15 sec.
mycobactericidal *EN14348*	ready-to-use	30 sec.
yeasticidal *EN13624*	ready-to-use	15 sec.
fungicidal *EN13624*	ready-to-use	30 sec.

Efficacy	Concentration	Contact time
virucidal against enveloped viruses *in accordance with DVV (German Registered Association for Combating Viral Diseases)//RKI Guideline*	ready-to-use	30 sec.
limited spectrum virucidal activity *EN14476*	ready-to-use	15 sec.
Adenovirus (type 5) *EN14476*	ready-to-use	15 sec.
Norovirus (MNV) *EN14476*	ready-to-use	15 sec.
virucidal *EN14476*	ready-to-use	60 sec.
Poliovirus *EN14476*	ready-to-use	60 sec.

Application area	Concentration	Contact time
hygienic hand disinfection *EN13727, EN1500*	ready-to-use	30 sec.
surgical hand disinfection *EN13727, EN12791*	ready-to-use	90 sec.

Certificates

- VAH certificate

desderman® pure

Product data

100 g solution contains the following active ingredients:
78.2 g ethanol 96 %, 0.1 g biphenyl-2-ol

Chemical-physical data	
Color	colourless
Density	ca. 0,83 g/cm3 / 20 °C
Flash point	16 °C / Method : DIN 51755 Part 1
Form	liquid
pH	Not applicable

Special advice

BAuA Reg.-Nr.: N-84937
Use disinfectants safely. Always read the label and product information before use.
For external application. Do not bring into contact with open flames or electrical heat sources that are switched on.

Information for order

Item	Delivery form	Item no.
desderman pure INT 100 ml FL	30/Carton	on request
desderman pure INT 500 ml FL	20/Carton	on request
desderman pure INT hyclick 500 ml FL	20/Carton	on request
desderman pure INT 1 l FL	10/Carton	on request
desderman pure INT 1 l EF	10/Carton	on request
desderman pure INT hyclick 1 l FL	10/Carton	on request
desderman pure INT 5 l KA	1/Canister	on request

These products are not available in every country. For more information please contact our local subsidiary or distributor.

Application aids

Application aids	Item no.
Can key for 5 + 10 l	135810
Dispenser KHK 1000 (approx. 0.75-1.5ml per stroke)	669700
Dispenser KHK 500 (approx. 0.75-1.5ml per stroke)	669600
Product dispenser long arm 1000 ml	669710
Product dispenser long arm 500 ml	669610
schülke dosing feeder 5 l / 10 l (20ml / stroke)	117101
schülke tap for 5 l / 10 l can	135501
sm 2 500 (approx- 1.0-3.0ml per stroke)	668600
sm 2 Universal (approx. 1.0 - 3.0 ml per stroke)	668500

Related Products

- desderman® pure gel
- sensiva® dry skin balm
- sensiva® protective cream
- sensiva® protective emulsion
- sensiva® regeneration cream
- sensiva® wash lotion

Environmental information

schülke manufactures products economically and with advanced, safe and environmentally friendly production processes while at the same time maintaining our high quality standards.

Expert opinion and information

Please visit our website for an overview of all available literature/reports on the product: www.schuelke.com.
For individual questions:
Application Department
Phone: +49 40 52100-666
E-Mail: info@schuelke.com

Schülke & Mayr GmbH holds a Manufacturer's Authorisation according to sect 13 para 1 German Drug Law and Certificates of GMP Compliance for medicinal products.

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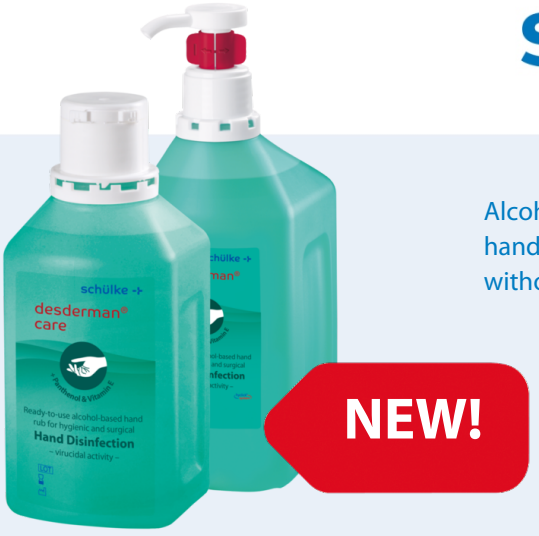

desderman® care

Alcohol-based hand rub for hygienic and surgical hand disinfection with panthenol and vitamin E, without colour and perfume

Our Plus

- all-season product: protects safely against infections all year round!
- broad spectrum of efficacy (incl. viruses according EN 14476)
- outstanding skin feeling through an innovative skin care formula (ProPanthenol-complex and vitamin E)
- care effect clinically confirmed (according to application and skin compatibility study (DermaTronnier, 2017))
- free of residual active substances

Application areas

- **hygienic hand disinfection (EN 13727 + EN 1500):**
  Rub a sufficient amount into dry hands, contact time 30 sec.
- **surgical hand disinfection (EN 13727 + EN 12791):**
  Rub a sufficient amount into dry hands and forearms, contact time 90 sec.

Instructions for use

The product is to be used undiluted. During the contact time for hygienic and surgical hand disinfection, the product should be applied in portions so that the hands or hands and forearms remain well moistened during the entire application time.

Microbiological efficacy

Efficacy	Concentration	Contact time
bactericidal *EN13727*	ready-to-use	15 sec.
mycobactericidal *EN14348*	ready-to-use	15 sec.
yeasticidal *EN13624*	ready-to-use	15 sec.
fungicidal *EN13624*	ready-to-use	60 sec.

Efficacy	Concentration	Contact time
virucidal against enveloped viruses *EN14476*	ready-to-use	15 sec.
limited spectrum virucidal activity *EN14476*	ready-to-use	15 sec.
Norovirus (MNV) *EN14476*	ready-to-use	15 sec.
virucidal *EN14476*	ready-to-use	30 sec.
Poliovirus *EN14476*	ready-to-use	30 sec.
Rotavirus *EN14476*	ready-to-use	15 sec.
Adenovirus (type 5) *EN14476*	ready-to-use	15 sec.

Application area	Concentration	Contact time
hygienic hand disinfection *EN13727, EN1500*	ready-to-use	30 sec.
surgical hand disinfection *EN13727, EN12791*	ready-to-use	90 sec.

Certificates

- VAH certificate

desderman® care

Product data

100 g solution contains the following active ingredients:
89,1 g Ethanol 96% (v/v)

Chemical-physical data	
Color	colourless
Density	approx. 0,83 g/cm3 / 20 °C
Flash point	17 °C / Method : DIN EN ISO 13736
Form	liquid
pH	Not applicable

Special advice

BAuA Reg.-Nr.: N-84378
Use disinfectants safely. Always read the label and product information before use.
For external application. Do not bring into contact with open flames or electrical heat sources that are switched on.

Information for order

Item	Delivery form	Item no.
desderman care DE FR 100 ml FL	30/Carton	on request
desderman care DE FR EN AE 500 ml FL	20/Carton	on request
desderman care click DE FR EN 500 ml FL	20/Carton	on request
desderman care DE FR EN AE 1 l FL	10/Carton	on request
desderman care DE FR PL EN 1 l EF	10/Carton	on request
desderman care cl. DE FR EN 1 l FL	10/Carton	on request
desderman care DE FR EN 5 l KA	1/Canister	on request

These products are not available in every country. For more information please contact our local subsidiary or distributor.

Application aids

Application aids	Item no.
Can key for 5 + 10 l	135810
Dispenser KHK 1000 (approx. 0.75-1.5ml per stroke)	669700
Dispenser KHK 500 (approx. 0.75-1.5ml per stroke)	669600
hyclick dispenser 1000 ml	60000036
hyclick dispenser Vario	60000045
Product dispenser long arm 1000 ml	669710
Product dispenser long arm 500 ml	669610
schülke dosing feeder 5 l / 10 l (20ml / stroke)	117101
schülke tap for 5 l / 10 l can	135501
sm 2 500 (approx- 1.0-3.0ml per stroke)	668600
sm 2 Universal (approx. 1.0 - 3.0 ml per stroke)	668500

Related Products

- desderman® care gel
- sensiva® dry skin balm
- sensiva® protective cream
- sensiva® regeneration cream
- sensiva® wash lotion

Environmental information

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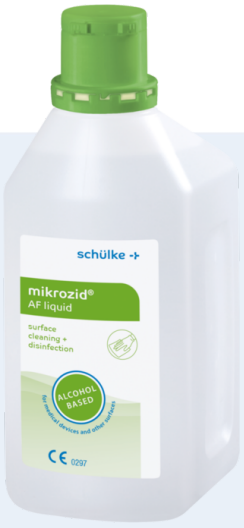

Alcohol-based, rapid disinfection of non-invasive medical devices and surfaces.

mikrozid® AF liquid

Our Plus

- broad efficacy within very short time
- leaves no streaks
- ready to use

Application areas

The product is suitable for disinfecting medical devices and other surfaces (PT2). Our classic product among the rapid disinfectant oroducts is suitable for disinfecting near-patient surfaces with an increased risk of infection that require short exposure times.

Instructions for use

Apply undiluted to the surface, wipe and allow taking effect. Ensure complete wetting and maintain the surface moist during the entire exposure time.
Ensure that all visible dirt is removed before disinfection. Maximum yield of 50 ml/m². **For professional use only.** Any serious incidents related to the product are to be reported to the manufacturer and competent authority. Not for final disinfection of semicritical and critical medical devices!

Microbiological efficacy

Efficacy	Concentration	Contact time
bactericidal *in accordance with VAH Guidelines with short contact times*	ready-to-use	1 min.
bactericidal *EN13727, EN16615 - dirty conditions*	ready-to-use	1 min.
tuberculocidal *EN14348 - dirty conditions*	ready-to-use	1 min.
yeasticidal *EN13624, EN16615 - dirty conditions*	ready-to-use	1 min.
yeasticidal *in accordance with VAH Guidelines with short contact times*	ready-to-use	1 min.
virucidal against enveloped viruses *EN14476 - dirty conditions*	ready-to-use	30 sec.
limited spectrum virucidal activity *EN14476 - dirty conditions*	ready-to-use	30 sec.
Polyoma SV40 *in accordance with DVV (German Registered Association for Combating Viral Diseases)//RKI Guideline*	ready-to-use	5 min.

Certificates

- ÖGHMP certificate
- VAH certificate
- IHO listed

CE 0297

mikrozid® AF liquid

Product data

Composition:
100 g solution contains the following active substances:
24,75 g Ethanol (94 %), 35 g Propan-1-ol
Labeling according to Regulation (EC) No. 648/2004: perfumes

Chemical-physical data	
Color	colourless
Density	ca. 0,89 g/cm3 / 20 °C
Flash point	27 °C / Method : DIN 51755 Part 1
Form	liquid
pH	Not applicable
Viscosity, dynamic	not determined

Special advice

Use disinfectants safely. Always read the label and product information before use.
The product has good material compatibility with metals and plastics (except acrylic glass and alcohol-sensitive paints).Surfaces that are particularly sensitive to alcohol, such as acrylic glass, must not be treated. When using alcoholic disinfectants, please observe the fire and explosion protection in accordance with the trade association regulation "Disinfection Work in Health Care". Keep away from heat and sources of ignition. Wearing protective gloves is advised. Further information is available on request.The shelf-life of the opened container can be found on the packaging.

Information for order

Item	Delivery form	Item no.
mikrozid® AF liquid 250 ml spray bottle	10/Carton	on request
mikrozid® AF liquid 1 l bottle	10/Carton	on request
mikrozid AF liquid -NLGRLVLT- 1 l FL	10/Carton	on request
mikrozid® AF liquid 200 l	1/drum(s)	on request
mikrozid® AF liquid 10 l	1/Canister	on request

These products are not available in every country. For more information please contact our local subsidiary or distributor.

Application aids

Application aids	Item no.
Can key for 5 + 10 l	135810
Compressed-air nozzle	120001
Decanter funnel	117901
measuring cup 50 ml	136102
Opener all-in-one (1l eurobottle/can/container)	70000804
schülke dosing feeder 5 l / 10 l (20ml / stroke)	117101
schülke tap for 5 l / 10 l can	135501
trigger-sprayer for 500 /1000 ml	180124

Related Products

- mikrozid® AF wipes
- mikrozid® sensitive liquid
- schülke wipes
- schülke wipes safe&easy

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This product information is not automatically updated.

KARTA CHARAKTERYSTYKI

schülke

[Sporządzona zgodnie z rozporządzeniem WE 1907/2006 (REACH) wraz z późn. zm.]

Sekcja 1: Identyfikacja substancji/mieszaniny i identyfikacja przedsiębiorstwa

1.1 Identyfikator produktu

Nazwa handlowa: **CHLORAMIX® DT**

1.2 Istotne zidentyfikowane zastosowania substancji lub mieszaniny oraz zastosowania odradzane

Zastosowania zidentyfikowane: tabletki o działaniu bakterio-, grzybo-, wiruso- , sporo- i prątkobójczym przeznaczone do dezynfekcji zmywalnych powierzchni mających i nie mających kontaktu z żywnością w zakładach opieki zdrowotnej, zakładach przetwórstwa spożywczego oraz w higienie komunalnej. Produkt do użytku profesjonalnego.

Zastosowania odradzane: nie określono.

1.3 Dane dotyczące dostawcy karty charakterystyki

Dostawca: **Schulke Polska Sp. z o.o.**

Adres: Al. Jerozolimskie 132, 02-305 Warszawa, Polska

Telefon/Fax: +48 22 11 60 700/+48 22 11 60 701

Adres e-mail osoby odpowiedzialnej za kartę charakterystyki: reachpolska.sm@schuelke.com

1.4 Numer telefonu alarmowego

112 (telefon ogólny), **998** (straż pożarna), **999** (pogotowie medyczne).

+48 607 218 174 (Ośrodek Kontroli Zatruć, Warszawa)

Sekcja 2: Identyfikacja zagrożeń

2.1 Klasyfikacja substancji lub mieszaniny

Acute Tox. 4 H302, **Eye Irrit. 2** H319, **STOT SE 3** H335, **Aquatic Acute 1** H400, **Aquatic Chronic 1** H410

Działa szkodliwie po połknięciu. Działa drażniąco na oczy. Może powodować podrażnienie dróg oddechowych. Działa bardzo toksycznie na organizmy wodne. Działa bardzo toksycznie na organizmy wodne, powodując długotrwałe skutki.

2.2 Elementy oznakowania

Piktogramy określające rodzaj zagrożenia i hasło ostrzegawcze

UWAGA

Nazwy niebezpiecznych składników na etykiecie

Zawiera: dichloroizocyjanuran sodu.

Zwroty wskazujące rodzaj zagrożenia

H302	Działa szkodliwie po połknięciu.
H319	Działa drażniąco na oczy.
H335	Może powodować podrażnienie dróg oddechowych.
H410	Działa bardzo toksycznie na organizmy wodne, powodując długotrwałe skutki.

Zwroty wskazujące środki ostrożności

P273	Unikać uwolnienia do środowiska.
P280	Stosować rękawice ochronne/odzież ochronną/ochronę oczu.
P301+P310	W PRZYPADKU POŁKNIĘCIA: natychmiast skontaktować się z LEKARZEM.
P305+P351+P338	W PRZYPADKU DOSTANIA SIĘ DO OCZU: Ostrożnie płukać wodą przez kilka minut. Wyjąć soczewki kontaktowe, jeżeli są i można je łatwo usunąć. Nadal płukać.
P337+P313	W przypadku utrzymywania się działania drażniącego na oczy: Zasięgnąć porady lekarza.
P391	Zebrać wyciek.
P501	Zawartość/pojemnik usuwać do odpowiednio oznakowanych pojemników na odpady zgodnie z krajowymi przepisami.

Informacje uzupełniające

EUH031 W kontakcie z kwasami uwalnia toksyczne gazy.

2.3 Inne zagrożenia

Komponenty mieszaniny nie spełniają kryteriów PBT lub vPvB zgodnie z załącznikiem XIII rozp. REACH. Produkt nie zawiera składników wpisanych do wykazu ustanowionego zgodnie z art. 59 ust. 1 jako posiadające właściwości zaburzające funkcjonowanie układu hormonalnego ani składników o właściwościach zaburzających funkcjonowanie układu hormonalnego zgodnie z kryteriami określonymi w rozporządzeniu 2017/2100/UE lub rozporządzeniu 2018/605/UE w stężeniu równym lub większym od 0,1 %. Produkt wykazuje działanie wybielające – może odbarwiać tkaniny.

Sekcja 3: Skład/informacja o składnikach

3.2 Mieszaniny

CAS: 51580-86-0 WE: 220-767-7 Numer indeksowy: 613-030-01-7 Numer rejestracji właściwej: substancja czynna – zwolniona z obowiązku rejestracji REACH	dichloroizocyjanuran sodu, dihydrat Acute Tox. 4 H302, Eye Irrit. 2 H319, STOT SE 3 H335, Aquatic Acute 1 H400, Aquatic Chronic 1 H410, (M=1), EUH031 [2)]	< 80 %
CAS: 124-04-9 WE: 204-673-3 Numer indeksowy: 607-144-00-9 Numer rejestracji właściwej: 01-2119457561-38-XXXX	kwas adypinowy [1)] Eye Irrit. 2 H319	< 20 %
CAS: 497-19-8 WE: 207-838-8 Numer indeksowy: 011-005-00-2 Numer rejestracji właściwej: 01-2119485498-19-XXXX	węglan sodu Eye Irrit. 2 H319	< 15 %

[1)] Substancja z określoną na poziomie krajowym wartością najwyższego dopuszczalnego stężenia w środowisku pracy.

[2)] dodatkowy kod zwrotu wskazujący rodzaj zagrożenia.

Pełen tekst zwrotów H przytoczony został w 16 sekcji karty.

Sekcja 4: Środki pierwszej pomocy

4.1 Opis środków pierwszej pomocy

W kontakcie ze skórą: zdjąć zanieczyszczoną odzież. Narażone partie skóry spłukać dokładnie wodą. W przypadku wystąpienia niepokojących objawów skontaktować się z lekarzem.

W kontakcie z oczami: wyjąć szkła kontaktowe, chronić niepodrażnione oko, zanieczyszczone oczy przepłukać dokładnie wodą przez co najmniej 10 minut przy odchylonych powiekach. Unikać silnego strumienia wody - ryzyko uszkodzenia rogówki. W przypadku utrzymującego się podrażnienia skontaktować się z lekarzem okulistą.

W przypadku spożycia: nie wywoływać wymiotów. Przepłukać usta wodą, następnie wypić ok. 0,5 litra wody. Nigdy nie podawać niczego do ust osobie nieprzytomnej. Natychmiast skontaktować się z lekarzem, pokazać opakowanie lub etykietę.

Po narażeniu drogą oddechową: wyprowadzić poszkodowanego na świeże powietrze, zapewnić ciepło i spokój. W razie złego samopoczucia skontaktować się z lekarzem.

4.2 Najważniejsze ostre i opóźnione objawy oraz skutki narażenia

W kontakcie ze skórą: kontakt z mokrym ciałem powoduje powstanie lepkiej mieszaniny, która może podrażniać skórę, oczy i błony śluzowe.

W kontakcie z oczami: zaczerwienienie, łzawienie, pieczenie, podrażnienie.

Po połknięciu: bóle brzucha, nudności, wymioty, poparzenia ust, gardła i przełyku, ryzyko perforacji przełyku i żołądka.

Po narażeniu drogą oddechową: podrażnienie układu oddechowego, kaszel.

4.3 Wskazania dotyczące wszelkiej natychmiastowej pomocy lekarskiej i szczególnego postępowania z poszkodowanym

Decyzję o sposobie postępowania ratunkowego podejmuje lekarz po dokładnej ocenie stanu poszkodowanego. Leczenie objawowe.

Sekcja 5: Postępowanie w przypadku pożaru

5.1 Środki gaśnicze

Odpowiednie środki gaśnicze: rozpylony strumień wody, proszek gaśniczy, CO_2, piasek. Środek gaśniczy dostosować do materiałów znajdujących się w pobliżu.
Niewłaściwe środki gaśnicze: zwarty strumień wody – ryzyko rozprzestrzenienia pożaru.

5.2 Szczególne zagrożenia związane z substancją lub mieszaniną

Podczas spalania mogą uwalniać się toksyczne i żrące gazy zawierające tlenki węgla, tlenki azotu, chlor, chlorowodór, ditlenek chloru oraz inne niezidentyfikowane produkty rozkładu termicznego. Unikać wdychania produktów spalania, mogą stwarzać zagrożenie dla zdrowia.

5.3 Informacje dla straży pożarnej

Środki ochrony ogólnej typowe w przypadku pożaru. Nie należy przebywać w zagrożonej ogniem strefie bez odpowiedniego ubrania odpornego na chemikalia i aparatu do oddychania z niezależnym obiegiem powietrza. Zagrożone ogniem pojemniki chłodzić z bezpiecznej odległości rozpylonym strumieniem wody. Nie należy dopuścić do przedostania się wody gaśniczej do kanalizacji, wód powierzchniowych i gruntowych. Zbierać zużyte środki gaśnicze.

Sekcja 6: Postępowanie w przypadku niezamierzonego uwolnienia do środowiska

6.1 Indywidualne środki ostrożności, wyposażenie ochronne i procedury w sytuacjach awaryjnych

Ograniczyć dostęp osób postronnych do obszaru awarii do czasu zakończenia odpowiednich operacji oczyszczania. Dopilnować, aby usuwanie awarii i jej skutków przeprowadzał wyłącznie przeszkolony personel. W przypadku dużych uwolnień odizolować zagrożony obszar. Stosować środki ochrony indywidualnej. Unikać zanieczyszczenia skóry i oczu. Zapewnić odpowiednią wentylację. Unikać formowania i wdychania pyłu.

6.2 Środki ostrożności w zakresie ochrony środowiska

W przypadku uwolnienia większych ilości produktu należy poczynić kroki w celu niedopuszczenia do rozprzestrzenienia się w środowisku naturalnym. Powiadomić odpowiednie służby ratownicze. W przypadku przedostania się do kanalizacji konieczne jest dostateczne rozcieńczenie mieszaniny wodą. Unikać kontaktu z kwasami i materiałami palnymi.

6.3 Metody i materiały zapobiegające rozprzestrzenianiu się skażenia i służące do usuwania skażenia

Uwolniony produkt zebrać mechanicznie unikając pylenia i umieścić w odpowiednio oznakowanych pojemnikach. Zebrany materiał potraktować jak odpady. W przypadku rozlania roztworu produktu zabezpieczyć miejsce wycieku przed przedostaniem się mieszaniny do wód i kanalizacji, mniejsze ilości rozcieńczyć dużą ilością wody. Następnie zebrać za pomocą materiałów wchłaniających ciecze (np. uniwersalne substancje wiążące itp.) i umieścić w oznakowanych pojemnikach. Zebrany materiał potraktować jak odpady. Oczyścić i dobrze przewietrzyć zanieczyszczone miejsce.

6.4 Odniesienia do innych sekcji

Postępowanie z odpadami produktu – patrz sekcja 13 karty. Środki ochrony indywidualnej – patrz sekcja 8 karty.

Sekcja 7: Postępowanie z substancjami i mieszaninami oraz ich magazynowanie

7.1 Środki ostrożności dotyczące bezpiecznego postępowania

Pracować zgodnie z zasadami bezpieczeństwa i higieny. Podczas pracy nie jeść, nie pić i nie palić tytoniu. Stosować wyłącznie w dobrze wentylowanych pomieszczeniach. Unikać formowania i wdychania pyłu.

Nosić właściwe środki ochrony indywidualnej. Unikać kontaktu produktu z oczami i skórą. Nie dopuścić do przedostania się produktu do ust. Nieużywane opakowania trzymać szczelnie zamknięte. Nie pracować z produktem w pobliżu kwasów i materiałów kwaśnych – ryzyko powstania chloru.

7.2 Warunki bezpiecznego magazynowania, w tym informacje dotyczące wszelkich wzajemnych niezgodności

Przechowywać tylko w oryginalnych, szczelnie zamkniętych opakowaniach, w suchym, chłodnym i dobrze wentylowanym miejscu zabezpieczonym przed czynnikami atmosferycznymi. Trzymać z dala od żywności, napojów, wody pitnej, pasz dla zwierząt, materiałów palnych, kwasów i innych materiałów niekompatybilnych (patrz podsekcja 10.5). Chronić przed bezpośrednim nasłonecznieniem. Zalecana temperatura magazynowania: od -10 °C do +30 °C. Nie przechowywać produktu w opakowaniach z metalu.

7.3 Szczególne zastosowanie(-a) końcowe

Brak zastosowań innych niż wymienione w podsekcji 1.2.

Sekcja 8: Kontrola narażenia/środki ochrony indywidualnej

8.1 Parametry dotyczące kontroli

Specyfikacja	NDS	NDSCh	NDSP	DSB
kwas adypinowy [CAS 124-04-9] - frakcja wdychalna	5 mg/m^3	10 mg/m^3	—	—
chlor [CAS 7782-50-5] *	0,7 mg/m^3	1,5 mg/m^3	—	—

*dane dla produktu rozkładu

Podstawa prawna: (Dz. U. 2018, poz. 1286 wraz z późn. zm.)

Zalecane procedury monitorowania

Należy zastosować procedury monitorowania stężeń niebezpiecznych komponentów w powietrzu oraz procedury kontroli czystości powietrza w miejscu pracy - o ile są one dostępne i uzasadnione na danym stanowisku - zgodnie z odpowiednimi Polskimi lub Europejskimi Normami z uwzględnieniem warunków panujących w miejscu narażenia oraz odpowiedniej metodologii pomiaru dostosowanej do warunków pracy. Tryb, rodzaj i częstotliwość badań i pomiarów powinny spełniać wymagania zawarte w rozporządzeniu Ministra Zdrowia z dnia 2 lutego 2011 r. (Dz. U. 2011, Nr 33, poz. 166 wraz z późn. zm.).

Wartości DNEL

dichloroizocyjanuran sodu, dihydrat [CAS 51580-86-0]

Pracownicy				
Droga narażenia	**Ostre, ogólnoustrojowe**	**Ostre, miejscowe**	**Chroniczne, ogólnoustrojowe**	**Chroniczne, miejscowe**
Inhalacyjna	—	—	8,11 mg/m^3	—
Skóra	—	—	2,3 mg/kg m.c./ dzień	—

Wartości PNEC

dichloroizocyjanuran sodu, dihydrat [CAS 51580-86-0]

	PNEC
woda słodka	0,002 mg/l
woda morska	1,52 mg/l
osad wody słodkiej	7,56 mg/kg suchej masy
gleba	0,756 mg/L
oczyszczalnia ścieków	0,59 mg/kg suchej masy

8.2 Kontrola narażenia

Stosowne techniczne środki kontroli

Przestrzegać ogólnych zasad bezpieczeństwa i higieny. Podczas pracy nie jeść, nie pić i nie palić tytoniu. Przed przerwą i po zakończeniu pracy dokładnie umyć ręce wodą z mydłem, używać kremu ochronnego. W miejscu pracy należy zapewnić wentylację ogólną i/lub miejscową w celu utrzymania stężeń czynników szkodliwych w powietrzu poniżej ustalonych wartości dopuszczalnych. Unikać zanieczyszczenia oczu i skóry.

Indywidualne środki ochrony takie jak indywidualne wyposażenie ochronne

Konieczność zastosowania i dobór odpowiednich środków ochrony indywidualnej powinny uwzględniać rodzaj zagrożenia stwarzanego przez produkt, warunki w miejscu pracy oraz sposób postępowania z produktem. Stosowane środki ochrony indywidualnej muszą spełniać wymagania zawarte w rozporządzeniu (UE) 2016/425 oraz w odpowiednich normach. Pracodawca obowiązany jest zapewnić środki ochrony odpowiednie do wykonywanych czynności oraz spełniające wszystkie wymagania jakościowe, w tym również ich konserwację i oczyszczanie. Wszelki zanieczyszczony lub uszkodzony sprzęt ochrony osobistej musi być natychmiast wymieniony.

Ochrona rąk i ciała:

Stosować rękawice ochronne zgodnie z normą EN 374. Zalecany materiał na rękawice: lateks. W przypadku krótkotrwałego kontaktu stosować rękawice ochronne o poziomie skuteczności 2 lub większym (czas przebicia > 30 minut). W przypadku długotrwałego kontaktu stosować rękawice ochronne o poziomie skuteczności 6 (czas przebicia > 480 minut). Stosować odzież ochronną i obuwie ochronne. Zabrudzone ubranie uprać przed ponownym założeniem.

Przy stosowaniu rękawic ochronnych w kontakcie z produktami chemicznymi należy pamiętać o tym, że podane poziomy skuteczności i odpowiadające im czasy przebicia nie oznaczają rzeczywistego czasu ochrony na danym stanowisku pracy, gdyż na tę ochronę wpływa wiele czynników, jak np. temperatura, oddziaływanie innych substancji itp. Zaleca się natychmiastową wymianę rękawic, jeśli wystąpią jakiekolwiek oznaki ich zużycia, uszkodzenia lub zmiany w wyglądzie (kolorze, elastyczności, kształcie). Należy przestrzegać instrukcji producenta nie tylko w zakresie stosowania rękawic, ale również przy ich czyszczeniu, konserwacji i przechowywaniu. Ważny jest również prawidłowy sposób zdejmowania rękawic tak, aby uniknąć zanieczyszczenia rąk podczas wykonywania tej czynności.

Ochrona oczu:

Stosować szczelne okulary ochronne (typu gogle) lub ochronę twarzy.

Ochrona dróg oddechowych

W przypadku niewłaściwej wentylacji lub w sytuacjach awaryjnych zakładać odpowiednią ochronę dróg oddechowych zgodnie z normą EN 143, EN 14387.

Zagrożenia termiczne

Nie występują.

Kontrola narażenia środowiska

Unikać zrzutów do środowiska, nie wprowadzać do kanalizacji. Ewentualne emisje z układów wentylacyjnych i urządzeń procesowych powinny być sprawdzane w celu określenia ich zgodności z wymogami prawa o ochronie środowiska.

Sekcja 9: Właściwości fizyczne i chemiczne

9.1 Informacje na temat podstawowych właściwości fizycznych i chemicznych

Stan skupienia:	ciało stałe/tabletki
Kolor:	biały
Zapach:	charakterystyczny dla chloru
Temperatura topnienia/krzepnięcia:	nie oznaczono
Temperatura wrzenia lub początkowa temperatura wrzenia i zakres temperatur wrzenia:	nie dotyczy
Palność materiałów:	nie oznaczono
Dolna i górna granica wybuchowości:	nie oznaczono
Temperatura zapłonu:	nie dotyczy
Temperatura samozapłonu:	nie oznaczono
Temperatura rozkładu:	240 °C
pH:	4-6 (20 °C, 1 % roztwór wodny)
Lepkość kinematyczna:	nie dotyczy
Rozpuszczalność:	rozpuszcza się w wodzie (50 g/100 ml)
Współczynnik podziału n-oktanol/woda (wartość współczynnika log):	nie oznaczono
Prężność pary:	nie dotyczy

Gęstość lub gęstość względna:	nie dotyczy
Względna gęstość pary:	nie dotyczy
Charakterystyka cząsteczek:	nie oznaczono

9.2 Inne informacje

Zawartość aktywnego chloru: ≥ 43 % wag.

Produkt wykazuje działanie wybielające, np. odbarwia tkaniny.

Sekcja 10: Stabilność i reaktywność

10.1 Reaktywność

Produkt reaktywny. Patrz także podsekcje: 10.3-10.5.

10.2 Stabilność chemiczna

Przy prawidłowym użytkowaniu i przechowywaniu produkt jest stabilny.

10.3 Możliwość występowania niebezpiecznych reakcji

W kontakcie z kwasami i materiałami kwaśnymi uwalnia toksyczne gazy (chlor) - reakcja silnie egzotermiczna.

10.4 Warunki, których należy unikać

Unikać mocnego ogrzewania, temperatury ≥ 40 °C oraz długotrwałego, bezpośredniego nasłonecznienia. Chronić przed wilgocią.

10.5 Materiały niezgodne

Stężone i rozcieńczone kwasy oraz materiały kwaśne, reduktory (wodorki), sproszkowane metale, amoniak i jony amonowe, woda.

10.6 Niebezpieczne produkty rozkładu

Chlor, chlorowodór, tlenki chloru.

Sekcja 11: Informacje toksykologiczne

11.1 Informacje na temat klas zagrożenia zdefiniowanych w rozporządzeniu (WE) nr 1272/2008

Toksyczność komponentów

dichloroizocyjanuran sodu, dihydrat [CAS 51580-86-0]

LD_{50} (droga pokarmowa, szczur)	1823 mg/kg
LD_{50} (skóra, szczur)	> 2000 mg/kg

weglan sodu [CAS 497-19-8]

LD_{50} (droga pokarmowa, szczur)	4090 mg/kg

Toksyczność mieszaniny

Toksyczność ostra

Toksyczność ostrą mieszaniny (ATEmix) wyliczono na podstawie badań komponentów sklasyfikowanych po toksyczności ostrej oraz odpowiedniego współczynnika przeliczeniowego zawartego w Tabeli 3.1.2. załącznika I do rozporządzenia CLP wraz z późn. zm.

ATE_{mix} (doustnie)	992 mg/kg

Działa szkodliwie po połknięciu.

Działanie żrące/drażniące na skórę

W oparciu o dostępne dane kryteria klasyfikacji nie są spełnione.

Poważne uszkodzenie oczu/działanie drażniące na oczy

Działa drażniąco na oczy.

Działanie uczulające na drogi oddechowe lub skórę

W oparciu o dostępne dane kryteria klasyfikacji nie są spełnione.

Działanie mutagenne na komórki rozrodcze

W oparciu o dostępne dane kryteria klasyfikacji nie są spełnione.

Działanie rakotwórcze

W oparciu o dostępne dane kryteria klasyfikacji nie są spełnione.

Szkodliwe działanie na rozrodczość

W oparciu o dostępne dane kryteria klasyfikacji nie są spełnione.

Działanie toksyczne na narządy docelowe – narażenie jednorazowe

Może powodować podrażnienie dróg oddechowych.

Działanie toksyczne na narządy docelowe – narażenie powtarzane

W oparciu o dostępne dane kryteria klasyfikacji nie są spełnione.

Zagrożenie spowodowane aspiracją

W oparciu o dostępne dane kryteria klasyfikacji nie są spełnione.

Informacje dotyczące prawdopodobnych dróg narażenia

Drogi narażania: kontakt ze skórą, kontakt z oczami, po narażeniu drogą oddechową i po połknięciu. Więcej informacji na temat wpływu wywieranego każdą możliwą drogą narażenia patrz podsekcja 4.2.

Objawy związane z właściwościami fizycznymi, chemicznymi i toksykologicznymi

Patrz podsekcja 4.2.

Opóźnione, natychmiastowe oraz przewlekłe skutki krótko- i długotrwałego narażenia

Patrz podsekcja 4.2.

11.2 Informacje o innych zagrożeniach

Właściwości zaburzające funkcjonowanie układu hormonalnego

Produkt nie zawiera składników wpisanych do wykazu ustanowionego zgodnie z art. 59 ust. 1 jako posiadające właściwości zaburzające funkcjonowanie układu hormonalnego ani składników o właściwościach zaburzających funkcjonowanie układu hormonalnego zgodnie z kryteriami określonymi w rozporządzeniu 2017/2100/UE lub rozporządzeniu 2018/605/UE w stężeniu równym lub większym od 0,1 %.

Inne informacje

Nie są znane inne zagrożenia.

Sekcja 12: Informacje ekologiczne

12.1 Toksyczność

Toksyczność komponentów

dichloroizocyjanuran sodu, dihydrat [CAS 51580-86-0]

Toksyczność dla ryb LC_{50}	0,24 mg/l/96 h/*Oncorhynchus mykiss*
Toksyczność dla skorupiaków EC_{50}	< 1 mg/l *Daphnia magna*

Toksyczność mieszaniny

Działa bardzo toksycznie na organizmy wodne, powodując długotrwałe skutki.

12.2 Trwałość i zdolność do rozkładu

Brak danych.

12.3 Zdolność do bioakumulacji

Dane dla komponentów

dichloroizocyjanuran sodu, dihydrat [CAS 51580-86-0]

Nie należy spodziewać się bioakumulacji.

12.4 Mobilność w glebie

Produkt słabo mobilny w glebie, rozpuszcza się w wodzie i rozprzestrzenia się w środowisku wodnym.

12.5 Wyniki oceny właściwości PBT i vPvB

Substancje zawarte w mieszaninie nie są oceniane jako PBT i vPvB.

12.6 Właściwości zaburzające funkcjonowanie układu hormonalnego

Produkt nie zawiera składników wpisanych do wykazu ustanowionego zgodnie z art. 59 ust. 1 jako posiadające właściwości zaburzające funkcjonowanie układu hormonalnego ani składników o właściwościach zaburzających funkcjonowanie układu hormonalnego zgodnie z kryteriami określonymi w rozporządzeniu 2017/2100/UE lub rozporządzeniu 2018/605/UE w stężeniu równym lub większym od 0,1 %.

12.7 Inne szkodliwe skutki działania

Produkt nie jest klasyfikowany jako stwarzający zagrożenie dla warstwy ozonowej. Należy rozważyć możliwość innych szkodliwych skutków oddziaływania produktu na środowisko (np. wpływ na wzrost ocieplenia globalnego).

Sekcja 13: Postępowanie z odpadami

13.1 Metody unieszkodliwiania odpadów

Zalecenia dotyczące mieszaniny: utylizować zgodnie z obowiązującymi przepisami, nie wprowadzać do kanalizacji. Pozostałości składować w oryginalnych pojemnikach. Nie mieszać z innymi odpadami. Odpadowy produkt przekazać do utylizacji do uprawnionego zakładu. Proponowany kod odpadu: 16 03 05* (Organiczne odpady zawierające substancje niebezpieczne).

Zalecenia dotyczące zużytych opakowań: odzysk / recykling / likwidację odpadów opakowaniowych przeprowadzać zgodnie z obowiązującymi przepisami. Tylko opakowania całkowicie opróżnione mogą być przeznaczone do recyklingu. Nie mieszać z innymi odpadami. Kod odpadu dla nieoczyszczonych opakowań: 15 01 10* (Opakowania zawierające pozostałości substancji niebezpiecznych lub nimi zanieczyszczone).

Krajowe akty prawne: ustawa o odpadach (t.j. Dz. U. 2022, poz. 699, wraz z późn. zm.), ustawa o gospodarce opakowaniami i odpadami opakowaniowymi (t.j. Dz. U. 2020, poz. 1114, wraz z późn. zm.).
Unijne akty prawne: dyrektywy Parlamentu Europejskiego i Rady: 2008/98/WE wraz z późn. zm. i 94/62/WE wraz z późn. zm.

Sekcja 14: Informacje dotyczące transportu

14.1 Numer UN lub numer identyfikacyjny ID

UN 3077

14.2 Prawidłowa nazwa przewozowa

MATERIAŁ ZAGRAŻAJĄCY ŚRODOWISKU STŁAY I.N.O. (dichloroizocyjanuran sodu, dihydrat)

14.3 Klasa(-y) zagrożenia w transporcie

9

14.4 Grupa pakowania

III

14.5 Zagrożenia dla środowiska

Mieszanina stanowi zagrożenie dla środowiska w myśl przepisów transportowych.

14.6 Szczególne środki ostrożności dla użytkowników

Podczas manipulowania ładunkiem zakładać środki ochrony indywidualnej zgodnie z sekcją 8. Jeżeli jakikolwiek materiał wydostał się z opakowania i rozlał się lub rozsypał wewnątrz pojazdu lub kontenera, to do czasu ich dokładnego oczyszczenia, a w razie potrzeby dezynfekcji lub odkażenia, pojazd lub kontener nie może być ponownie użyty. Wszystkie inne materiały i przedmioty przewożone w tym pojeździe lub kontenerze powinny być sprawdzone pod kątem ewentualnego skażenia.

14.7 Transport morski luzem zgodnie z instrumentami IMO

Nie dotyczy.

Inne informacje

ADR	ilości ograniczone:	5 kg
	nr rozpoznawczy zagrożenia:	90
IMDG	zagrożenie dla środowiska / marine pollutant:	tak / yes

Sekcja 15: Informacje dotyczące przepisów prawnych

15.1 Przepisy prawne dotyczące bezpieczeństwa, zdrowia i ochrony środowiska specyficzne dla substancji lub mieszaniny

Ustawa z dnia 25 lutego 2011 r. o substancjach chemicznych i ich mieszaninach (t.j. Dz. U. 2022, poz. 1816).
Rozporządzenie Ministra Rodziny, Pracy i Polityki Społecznej z dnia 12 czerwca 2018 r. w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy (Dz. U. 2018, poz. 1286, wraz z późn. zm.).
Ustawa z dnia 14 grudnia 2012 r. o odpadach (t.j. Dz. U. 2022, poz. 699, wraz z późn. zm.).
Ustawa z dnia 13 czerwca 2013 r. o gospodarce opakowaniami i odpadami opakowaniowymi (t.j. Dz. U. 2020, poz. 1114, wraz z późn. zm.).
Rozporządzenie Ministra Klimatu z dnia 2 stycznia 2020 r. w sprawie katalogu odpadów (Dz. U. 2020, poz. 10).
Rozporządzenie Ministra Zdrowia z dnia 2 lutego 2011 r. w sprawie badań i pomiarów czynników szkodliwych dla zdrowia w środowisku pracy (Dz. U. 2011, Nr 33, poz. 166, wraz z późn. zm.).
Umowa **ADR** dotycząca międzynarodowego przewozu drogowego towarów niebezpiecznych.
IMDG Code International Maritime Dangerous Goods Code.
IATA Dangerous Goods Regulations.
1907/2006/WE Rozporządzenie Parlamentu Europejskiego i Rady z dnia 18 grudnia 2006 r. w sprawie rejestracji, oceny, udzielania zezwoleń i stosowania ograniczeń w zakresie chemikaliów (REACH), utworzenia Europejskiej Agencji Chemikaliów, zmieniające dyrektywę 1999/45/WE oraz uchylające Rozporządzenie Rady (EWG) nr 793/93 i nr 1488/94, jak również dyrektywę Rady 76/769/EWG i dyrektywę Komisji 91/155/EWG, 93/67/EWG, 93/105/WE i 2000/21/WE wraz z późn. zm.
1272/2008/WE Rozporządzenie Parlamentu Europejskiego i Rady z dnia 16 grudnia 2008 r. w sprawie klasyfikacji, oznakowania i pakowania substancji i mieszanin, zmieniające i uchylające dyrektywy 67/548/EWG i 1999/45/WE oraz zmieniające rozporządzenie (WE) nr 1907/2006 wraz z późn. zm.
2020/878/UE Rozporządzenie Komisji z dnia 18 czerwca 2020 r. zmieniające załącznik II do rozporządzenia (WE) nr 1907/2006 Parlamentu Europejskiego i Rady w sprawie rejestracji, oceny, udzielania zezwoleń i stosowanych ograniczeń w zakresie chemikaliów.
2000/39/WE Dyrektywa Komisji z dnia 8 czerwca 2000 r. ustanawiająca pierwszą listę indykatywnych wartości granicznych narażenia na czynniki zewnętrzne podczas pracy w związku z wykonaniem dyrektywy Rady 98/24/EWG w sprawie ochrony zdrowia i bezpieczeństwa pracowników przed ryzykiem związanym z czynnikami chemicznymi w miejscu pracy.
2006/15/WE Dyrektywa Komisji z dnia 7 lutego 2006 r. ustanawiająca drugi wykaz indykatywnych dopuszczalnych wartości narażenia zawodowego w celu wykonania dyrektywy Rady 98/24/WE oraz zmieniająca dyrektywy 91/322/EWG i 2000/39/WE.
2009/161/UE Dyrektywa Komisji z dnia 17 grudnia 2009 r. ustanawiająca trzeci wykaz wskaźnikowych wartości narażenia zawodowego w celu wykonania dyrektywy Rady 98/24/WE oraz zmieniająca dyrektywę Komisji 2000/39/WE.
2017/164/UE Dyrektywa Komisji z dnia 31 stycznia 2017 r. ustanawiająca czwarty wykaz wskaźnikowych dopuszczalnych wartości narażenia zawodowego zgodnie z dyrektywą Rady 98/24/WE oraz zmieniająca dyrektywy Komisji 91/322/EWG, 2000/39/WE i 2009/161/UE.
2019/1831/UE Dyrektywa Komisji z dnia 24 października 2019 r. ustanawiająca piąty wykaz wskaźnikowych dopuszczalnych wartości narażenia zawodowego zgodnie z dyrektywą Rady 98/24/WE oraz zmieniająca dyrektywę Komisji 2000/39/WE.
2008/98/WE Dyrektywa Parlamentu Europejskiego i Rady z dnia 19 listopada 2008 r. w sprawie odpadów oraz uchylająca niektóre dyrektywy wraz z późn. zm.
94/62/WE Dyrektywa Parlamentu Europejskiego i Rady z dnia 20 grudnia 1994 r. w sprawie opakowań i odpadów opakowaniowych wraz z późn. zm.
2016/425/UE Rozporządzenie Parlamentu Europejskiego i Rady z dnia 9 marca 2016 r. w sprawie środków ochrony indywidualnej oraz uchylenia dyrektywy Rady 89/686/EWG.

15.2 Ocena bezpieczeństwa chemicznego

Ocena bezpieczeństwa chemicznego dla mieszaniny nie jest wymagana.

Sekcja 16: Inne informacje

Pełen tekst zwrotów H z sekcji 3 karty

H302	Działa szkodliwie po połknięciu.
H319	Działa drażniąco na oczy.
H335	Może powodować podrażnienie dróg oddechowych.
H400	Działa bardzo toksycznie na organizmy wodne.
H410	Działa bardzo toksycznie na organizmy wodne, powodując długotrwałe skutki.
EUH031	W kontakcie z kwasami uwalnia toksyczne gazy.

KARTA CHARAKTERYSTYKI

schülke

Wyjaśnienie skrótów i akronimów

Acute Tox. 4	Toksyczność ostra kat. 4
Aquatic Acute 1	Stwarzające zagrożenie dla środowiska wodnego kat. 1
Aquatic Chronic 1	Stwarzające zagrożenie dla środowiska wodnego kat. 1
Eye Irrit. 2	Działanie drażniące na oczy kat. 2
STOT SE 3	Działanie toksyczne na narządy docelowe – narażenie jednorazowe kat. 3
NDS	Najwyższe Dopuszczalne Stężenie
NDSCh	Najwyższe Dopuszczalne Stężenie Chwilowe
NDSP	Najwyższe Dopuszczalne Stężenie Pułapowe
DSB	Dopuszczalne Stężenie w materiale Biologicznym
PBT	Substancja trwała, wykazująca zdolność do bioakumulacji i toksyczna
vPvB	Substancje bardzo trwałe i o bardzo dużej zdolności do bioakumulacji

Szkolenia

Przed przystąpieniem do pracy z produktem użytkownik powinien zapoznać się z zasadami BHP odnośnie obchodzenia się z chemikaliami, a w szczególności odbyć odpowiednie szkolenie stanowiskowe. Osoby związane z transportem materiałów niebezpiecznych w myśl Umowy ADR powinny zostać odpowiednio przeszkolone w zakresie wykonywanych obowiązków (szkolenie ogólne, stanowiskowe oraz z zakresu bezpieczeństwa).

Odniesienia do kluczowej literatury i źródeł danych

Karta została opracowana na podstawie karty charakterystyki dostarczonej przez producenta, danych literaturowych, internetowych baz danych oraz posiadanej wiedzy i doświadczenia, z uwzględnieniem aktualnie obowiązujących przepisów prawnych.

Klasyfikacja i procedury wykorzystane w celu dokonania klasyfikacji mieszaniny:

Klasyfikacji dokonano na podstawie badań fizykochemicznych oraz danych o zawartości składników niebezpiecznych metodą obliczeniową w oparciu o wytyczne rozporządzenia 1272/2008/WE (CLP) wraz z późn. zm.

Dodatkowe informacje

Data aktualizacji:	22.11.2022 r.
Wersja:	5.0/PL
Zmiany:	Sekcje: 2-16.
Karta wystawiona przez:	**THETA Consulting Sp. z o.o.** (na podstawie danych producenta)

Powyższe informacje powstały w oparciu o aktualnie dostępne dane charakteryzujące produkt oraz doświadczenie i wiedzę posiadaną w tym zakresie przez producenta. Nie stanowią one opisu jakościowego produktu ani przyrzeczenia określonych właściwości. Należy je traktować jako pomoc dla bezpiecznego postępowania w transporcie, składowaniu i stosowaniu produktu. Nie zwalnia to użytkownika od odpowiedzialności za niewłaściwe wykorzystanie powyższych informacji oraz z przestrzegania wszystkich norm prawnych obowiązujących w tej dziedzinie.

EU Quality Management Certificate

This is to certify that the company

schülke

Schülke & Mayr GmbH

Robert-Koch-Straße 2
22851 Norderstedt
Germany

SRN: DE-MF-000005701

has established, implemented and maintains a Quality Management System in accordance with

Annex IX, Chapter I and III of the Regulation (EU) 2017/745

Conformity Assessment based on a Quality Management System and on Assessment of Technical Documentation

for the device categories and products listed in the Annex of this certificate.

For placing of devices of class IIa, IIb or III listed in the Annex on the market, an additional certificate according to Annex IX, Chapter II is required.

Certificate registration no.	004567 MDR2017Q
Certificate ID	1000120979
Effective date	2023-05-17
Expiry date	2028-05-03
Frankfurt am Main,	2023-05-17

Benannt durch/Designated by
Zentralstelle der Länder für Gesundheitsschutz bei Arzneimitteln und Medizinprodukten
www.zlg.de
BS-MDR-094

DQS Medizinprodukte GmbH

Sigrid Uhlemann
Managing Director

Michael Bothe
Head of Certification Body
(active medical devices)

Szymon Kurdyn
Head of Certification Body
(non-active medical devices)

Accredited Body: DQS Medizinprodukte GmbH, August-Schanz-Str. 21, 60433 Frankfurt am Main
DQS Medizinprodukte GmbH is a Notified Body according to Regulation (EU) 2017/745 of the Council concerning medical devices with the Identification Number 0297.
The validity of this certificate can only be verified by the QR-code.

420.90 Version 5.0

Annex to EU Quality Management Certificate
SRN of Manufacturer: DE-MF-000005701
Certificate ID: 1000120979

Device categories covered by this certificate:

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Risk classification:	IIa
Intended purpose:	Cleaning and disinfection agent for chemo-thermal reprocessing

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Risk classification:	IIa
Intended purpose:	Cleaning and disinfection agent for manual reprocessing of medical devices

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Risk classification:	IIa
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Risk classification:	IIa
Intended purpose:	Disinfectant for suction unit surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Risk classification:	IIa
Intended purpose:	Disinfectant medical devices

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Risk classification:	IIa
Intended purpose:	Disinfection of dental mouldings

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Risk classification:	IIb
Intended purpose:	Disinfectant of medical device surfaces at the endpoint of reprocessing

Annex to EU Quality Management Certificate
SRN of Manufacturer: DE-MF-000005701
Certificate ID: 1000120979

Examinations and tests performed:
004567 A209710MED MDR2017Q dated 2022-09-09

Further conditions for or limitations to the validity of the certificate:
The manufacturer's quality management system is subject to periodic surveillance in accordance with Annex IX, Chapter 1, Section 3.

Reference to previous certificates:

Revision	Date of Issue	Certificate-ID	Description of change
01	2023-05-04	170779017	Addition of the Device category for the product Mikrozid® PAA wipes

EU Technical Documentation Assessment Certificate

This is to certify that the company

schülke

Schülke & Mayr GmbH

Robert-Koch-Straße 2
22851 Norderstedt
Germany

SRN: DE-MF-000005701

has established and maintains the required Technical Documentation in accordance with

Annex IX, Chapter II of the Regulation (EU) 2017/745

Conformity Assessment based on a Quality Management System and on Assessment of Technical Documentation

for the device categories and products listed in the Annex of this certificate.

The conformity of the Technical Documentation has been verified and confirmed in Conformity Assessment Procedures according to Article 52. The Technical Documentation is subject to regular surveillance. Limitations to this certificate are listed in the Annex.

For placing devices listed in the Annex on the market, an additional certificate according to Annex IX, Chapter I and III is required.

Devices of class IIa and IIb listed in the Annex may bear the CE marking with the identification number of the Notified Body (0297).

Certificate registration no.	004567 MDR2017B
Certificate ID	1000120967
Effective date	2023-05-17
Expiry date	2028-05-03
Frankfurt am Main,	2023-05-17

Benannt durch/Designated by
Zentralstelle der Länder für Gesundheitsschutz bei Arzneimitteln und Medizinprodukten
www.zlg.de
BS-MDR-094

DQS Medizinprodukte GmbH

Sigrid Uhlemann
Managing Director

Michael Bothe
Head of Certification Body
(active medical devices)

Szymon Kurdyn
Head of Certification Body
(non-active medical devices)

Annex to EU Technical Documentation Assessment Certificate
SRN of Manufacturer: DE-MF-000005701
Certificate ID: 1000120967

Device categories and variants covered by this certificate:

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Antifect AF (N)
Models:	n/a
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000016A9
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Antifect extra
Models:	n/a
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000017AB
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Aspirmatic
Models:	Aspirmatic, UnoDent Aspisept Daily, PremEco AS
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000018AD
Intended purpose:	Disinfectant for suction unit surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Dentavon
Models:	Dentavon, Perform ID, UnoDent Unoguard
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000019AF
Intended purpose:	Disinfection of dental mouldings

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Gigasept AF forte
Models:	n/a
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000035AD
Intended purpose:	Cleaning and disinfection agent for manual reprocessing of medical devices

Annex to EU Technical Documentation Assessment Certificate
SRN of Manufacturer: DE-MF-000005701
Certificate ID: 1000120967

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Gigasept instru AF
Models:	Gigasept instru AF, UnoDent Surgical Instru. Cleanser
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000037AH
Intended purpose:	Cleaning and disinfection agent for manual reprocessing of medical devices

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Gigazyme X-tra
Models:	n/a
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000039AM
Intended purpose:	Cleaning and disinfection agent for manual reprocessing of medical devices

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Mikrozid AF
Models:	Mikrozid AF liquid, Mikrozid AF wipes, Terralin liquid, Mikrozid liquid, Mikrozid wipes, Antifect N liquid, Prem Eco Plus, UnoDent Unosept, UnoDent Unowipes, Terralin AF wipes
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC000000209Y
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Mikrozid sensitive
Models:	Mikrozid sensitive liquid, Mikrozid sensitive wipes, Mikrozid alcohol free liquid, Mikrozid alcohol free wipes, Terralin sensitive wipes
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000021A2
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Mikrozid universal
Models:	Mikrozid universal liquid, Mikrozid universal wipes, DESIFOR-ONE multi wipes, Pursept A Xpress S, Pursept UniSprint Wipes, Terralin universal wipes
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000022A4
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Annex to EU Technical Documentation Assessment Certificate
SRN of Manufacturer: DE-MF-000005701
Certificate ID: 1000120967

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Mucalgin
Models:	Mucalgin, Mucalgin dental
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000028AG
Intended purpose:	Disinfection of dental mouldings

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Perform
Models:	Perform, DESIFOR-ONE PROTECT
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000023A6
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Puresept
Models:	n/a
Risk classification:	IIa
Basic-UDI-DI:	4032651-BSC000000129Z
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Pursept AF
Models:	n/a
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000024A8
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Quartamon med
Models:	n/a
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000026AC
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Annex to EU Technical Documentation Assessment Certificate
SRN of Manufacturer: DE-MF-000005701
Certificate ID: 1000120967

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Terralin protect
Models:	Terralin protect, TPH protect
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000027AE
Intended purpose:	Disinfectant and cleaner for medical device surfaces

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Thermosept NDR
Models:	n/a
Risk classification:	IIa
Basic-UDI-DI:	4032651BSC00000043AC
Intended purpose:	Cleaning and disinfection agent for chemo-thermal reprocessing

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Gigasept® powerTrio disinfection wipe
Models:	n/a
Risk classification:	IIb
Basic-UDI-DI:	4032651BSC00000014A5
Intended purpose:	Disinfectant of medical device surfaces at the endpoint of reprocessing

Device category:	**MDN 1211 Non-active non-implantable devices for disinfecting, cleaning and rinsing**
Product name:	Mikrozid® PAA wipes
Models:	n/a
Risk classification:	IIb
Basic-UDI-DI:	4032651-BSC00000011-CP
Intended purpose:	Disinfectant of medical device surfaces at the endpoint of reprocessing

Annex to EU Technical Documentation Assessment Certificate
SRN of Manufacturer: DE-MF-000005701
Certificate ID: 1000120967

Examinations and tests performed:
004567 A209710MED MDR2017B dated 2023-04-19
004567 A209710MED MDR2017B Mikrozid® PAA wipes dated 2023-05-08

Further conditions for or limitations to the validity of the certificate:
n/a

Reference to previous certificates:

Revision	Date of Issue	Certificate-ID	Description of change
01	2023-05-04	170779018	Addition of Product Mikrozid® PAA wipes and new trade names Terralin AF , sensitive, universal wipes

CERTIFICATE

This is to certify that the company

schülke

Schülke & Mayr GmbH

Robert-Koch-Straße 2
22851 Norderstedt
Germany

with the organizational units/sites as listed in the annex

has implemented and maintains a **Quality Management System**.

Scope:
Development, production and sales of products for disinfection and cleaning of medical instruments, devices and surfaces as well as for wound treatment.

Through an audit, documented in a report, performed by DQS Medizinprodukte GmbH, it was verified that the management system fulfills the requirements of the following standard:

DIN EN ISO 13485 : 2016 + AC : 2017-07
EN ISO 13485 : 2016 + AC : 2018
ISO 13485 : 2016

Certificate registration no.	004567 MP2016
Certificate unique ID	1000188322
Effective date	2024-07-20
Expiry date	2027-07-19
Frankfurt am Main	2024-07-20

DAkkS
Deutsche
Akkreditierungsstelle
D-ZM-16021-01-00

DQS IS A MEMBER OF
IQNET

DQS Medizinprodukte GmbH

Sigrid Uhlemann
Managing Director

Szymon Kurdyn
Product Manager

August-Schanz-Straße 21, 60433 Frankfurt am Main,
Tel. +49 (0) 69 95427-300, info-med@dqs.de
The validity of the certification can only be verified by the QR-code.

414_90e Version 3.0

Annex to certificate
Certificate registration No.: 004567 MP2016
Certificate unique ID: 1000188322
Effective date: 2024-07-20

Schülke & Mayr GmbH

Robert-Koch-Straße 2
22851 Norderstedt
Germany

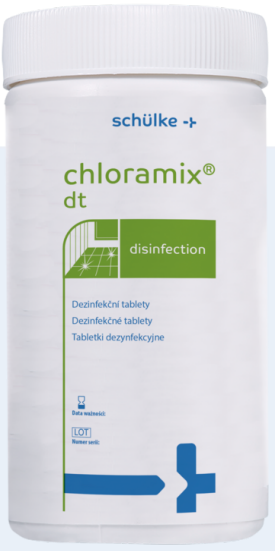
Location	Scope
525120 **Schülke & Mayr GmbH** Robert-Koch-Straße 2 22851 Norderstedt Germany	Development, production and sales of products for disinfection and cleaning of medical instruments, devices and surfaces as well as for wound treatment.
249794 **Schülke & Mayr AG** Hungerbüelstrasse 22 8500 Frauenfeld Switzerland	Sales of products for disinfection and cleaning of medical instruments, devices and surfaces as well as for wound treatment.
068164 **Schülke & Mayr Ges. m. b. H.** Seidengasse 9 1070 Wien Austria	Sales of products for disinfection and cleaning of medical instruments, devices and surfaces as well as for wound treatment.
389168 **Schülke France S.A.R.L.** Route des Varennes 71100 Chalon sur Saône France	Sales of products for disinfection and cleaning of medical instruments, devices and surfaces as well as for wound treatment.
082146 **Schülke & Mayr UK Ltd.** Cygnet House, 1 Jenkin Road, Meadowhall Sheffield S9 1AT United Kingdom	Sales of products for disinfection and cleaning of medical instruments, devices and surfaces as well as for wound treatment.

Annex to certificate
Certificate registration No.: 004567 MP2016
Certificate unique ID: 1000188322
Effective date: 2024-07-20

Schülke & Mayr GmbH

Robert-Koch-Straße 2
22851 Norderstedt
Germany

Location	Scope
226915 **Schülke & Mayr Benelux B.V.** Oudeweg 8d 2031 CC Haarlem Netherlands	Sales of products for disinfection and cleaning of medical instruments, devices and surfaces as well as for wound treatment.
515594 **Schulke Polska Sp. z o.o.** **Eurocentrum Office Complex** Budynek Delta al. Jerozolimskie 132 02-305 Warszawa Poland	Sales of products for disinfection and cleaning of medical instruments, devices and surfaces as well as for wound treatment.



Tabletkowany uniwersalny środek na bazie aktywnego chloru przeznaczony do dezynfekcji zmywalnych powierzchni i przedmiotów

chloramix® DT tabletki
tabletki dezynfekcyjne

Zalety

- łatwy w stosowaniu
- aktywny wobec zanieczyszczeń organicznych
- łatwe przygotowanie roztworu bez użycia urządzeń dozujących
- krótki czas działania

Obszary zastosowania

Uniwersalny środek, w postaci tabletek, na bazie aktywnego chloru przeznaczony do dezynfekcji materiału organicznego, zmywalnych powierzchni (podłogi, okładziny, boksy chłodnicze, stoły do przeróbki żywności, lady do wydawania żywności, lady) i przedmiotów (stoły, meble, łóżka, klamki, pojemniki na odpadki, WC, zlewy, grzebienie) w służbie zdrowia, w zakładach przetwórstwa spożywczego oraz w higienie komunalnej.

Właściwości produktu

Zastosowanie:
Dezynfekcja powierzchni w placówkach służby zdrowia, higienie komunalnej oraz przemyśle spożywczym
- obciążenie organiczne niskie - 1 tabletka /5l wody - 15 min.
- obciążenie organiczne wysokie - 1 tabletka/1,5l wody - 15 min.

Spektrum działania: preparat działa bakteriobójczo, grzybobójczo, prątkobójczo, sporobójczo i wirusobójczo.

Warunki czyste - spektrum działania
bakteriobójczo EN 13727 - 1 tabletka/5l wody - 5 min.
bakteriobójczo EN 13697 - 1 tabletka/10l wody - 15 min.
bakteriobójczo EN 16615 - 1 tabletka/3l wody - 15 min.
drożdżakobójczo EN 13697 - 1 tabletka/10l wody - 15 min.
drożdżakobójczo EN 16615 - 1 tabletka/3l wody - 15 min.
grzybobójczo EN 13697 - 1 tabletka/10l wody - 15 min.
wirusobójczo (adeno, polio, noro) EN 14476 - 1 tabletka/5l wody - 15 min.
prątkobójczo (M. avium, M. terrae) EN 14348 - 1 tabletka/5l wody - 30 min.
sporobójczo (C. difficile) EN 13704 - 10 tabletek/1,5l wody - 10 min.
sporobójczo (B. subtilis) EN 13704 - 1 tabletka/1,5l wody - 15 min.

Warunki brudne - spektrum działania
bakteriobójczo EN 13727 - 1 tabletka/1,5l wody - 15 min.
bakteriobójczo EN 13697 - 1 tabletka/5l wody - 15 min.
bakteriobójczo EN 16615 - 1 tabletka/1,5l wody - 5 min.
drożdżakobójczo EN 13624 - 1 tabletka/1,5l wody - 15 min.
drożdżakobójczo EN 13697 - 1 tabletka/5l wody - 15 min.
drożdżakobójczo EN 16615 - 1 tabletka/1,5l wody - 5 min.
grzybobójczo EN 13624 - 1 tabletka/1,5l wody - 15 min.
grzybobójczo EN 13697 - 1 tabletka/5l wody - 15 min.
wirusobójczo (adeno, polio, noro) EN 14476 - 1 tabletka/1,5l wody - 15 min.
bójczo wobec prątków (M. terrae) EN 14348 - 1 tabletka/1,5l wody - 15 min.
sporobójczo (C. difficile) EN 13704 - 10 tabletek/1,5l wody - 10 min.

Wskazówki dotyczące stosowania

Przygotowanie roztworu: rozpuścić w wodzie wymaganą do uzyskania oczekiwanego stężenia roztworu ilość tabletek.
Powierzchnie wchodzące w kontakt z żywnością należy po dezynfekcji dokładnie zmyć pitną wodą.
Dla jednoczesnego mycia i dezynfekcji można mieszać z neutralnym detergentem.

chloramix® DT tabletki

tabletki dezynfekcyjne

Dane produktu

Substancja czynna: dihydrat dichloroizocyjanuranu sodu 750g/kg
Zawartość aktywnego chloru: min 1,5g aktywnego Cl2 / tabletkę
pH roztworu 1% ok. 6
Prędkość rozpuszczania przy 25°C ok.10 min.

Wskazówki szczególne

Przechowywać w szczelnie zamkniętych, oryginalnych opakowaniach, w suchych, chłodnych i dobrze wentylowanych pomieszczeniach. Nie magazynować w pobliżu źródeł ciepła. Zalecana temperatura magazynowania od -20 do +30°C. Nie przechowywać w opakowaniach metalowych.
Data ważności: 3 lata od daty produkcji.

Informacje dotyczące zamówienia

Artykuł	Forma dostawy	Art.-Nr.
Chloramix DT tabl. 3,3gx300 ST 1 kg DS	6/Karton	319022

Badania i informacje

Numer pozwolenia na obrót produktem biobójczym: 0620/04
Na życzenie dostarczymy niezbędne raporty dotyczące preparatu.

Produktów biobójczych należy używać z zachowaniem środków ostrożności. Przed każdym użyciem należy przeczytać etykietę i informacje dotyczące produktu.

Schulke & Mayr GmbH posiada pozwolenie na wytwarzanie produktów leczniczych zgodnie z §13 ustawy o produktach leczniczych oraz posiada certyfikat GMP.

Podmiot odpowiedzialny
Schulke Polska Sp. z o. o.
Al. Jerozolimskie 132
02-305 Warszawa, Polska
Telefon +48 0 22 11-60-700
Telefax +48 0 22 11-60-701
www.schulke.pl
schulke.polska@schuelke.com

Wytwórca
Schulke CZ, s.r.o.
Lidicka 445
735 81 Bohumin, Czechy
Telefon + 420 558 320 260
www.schulke.cz

911770-PL-pl-03-17 8/2023
Informacje dotyczące produktu nie są automatycznie aktualizowane

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : desderman® care

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Disinfectants and general biocidal products

Recommended restrictions on use : Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 2

22851 Norderstedt
Germany
Telephone: +49 (0)40/ 52100-0
mail@schuelke.com

E-mail address of person responsible for the SDS/Contact person : Application Department
+49 (0)40/ 521 00 8800
ApplicationDepartment.SM@schuelke.com
(Schülke & Mayr UK Ltd.: +44-1142543500)

1.4 Emergency telephone number

Emergency telephone number : UK Poisons Emergency number: 0870 600 6266

Emergency telephone number : +49 (0)40 / 52 100 –0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2	H225: Highly flammable liquid and vapour.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/ container to an approved waste disposal plant.

Further information : Use biocides safely. Always read the label and product information before use.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Vapours are heavier than air and may spread along floors.
Take precautionary measures against static discharge.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Solution of the following substances with harmless additives.

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319	80 - 90
Myristylalcohol	112-72-1 204-000-3 - - -	Eye Irrit. 2; H319 Aquatic Chronic 1; H410	< 5

	01-2119485910-33-XXXX		

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Take off all contaminated clothing immediately.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.
If eye irritation persists, consult a specialist.

If swallowed : Do NOT induce vomiting.
Clean mouth with water and drink afterwards plenty of water.
If swallowed, seek medical advice immediately and show this container or label.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry powder
Alcohol-resistant foam
Water spray jet
Carbon dioxide (CO2)

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Vapours are heavier than air and may spread along floors.
Cool closed containers exposed to fire with water spray.

Hazardous combustion products : Vapours may form explosive mixtures with air.

5.3 Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Ensure adequate ventilation. Remove all sources of ignition.

6.2 Environmental precautions

Environmental precautions	:	Avoid subsoil penetration.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Wipe up with absorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4 Reference to other sections

see Section 8 + 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep away from children.
Advice on protection against fire and explosion	:	The hot product gives off combustible vapours. Take measures to prevent the build up of electrostatic charge.
Hygiene measures	:	Keep away from food and drink.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store at room temperature in the original container. Keep at temperature not exceeding 25 °C.
Further information on storage conditions	:	Keep away from direct sunlight. Keep container tightly closed.
Advice on common storage	:	Do not store together with explosives, oxidizing agents, organic peroxides and infectious products.

7.3 Specific end use(s)

Specific use(s)	:	The product falls under the regulation on biocide products (EU) 528/2012. Product type: 1

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Ethanol	Workers	Inhalation	Acute effects, Local effects	1900 mg/m3
	Workers	Skin contact	Chronic effects	343 mg/kg
	Workers	Inhalation	Chronic effects	950 mg/m3
Myristylalcohol	Workers	Skin contact	Short-term exposure, Systemic effects	125 mg/kg
	Workers	Inhalation	Short-term exposure, Systemic effects	220 mg/m3
	Workers	Skin contact	Long-term exposure, Systemic effects	125 mg/kg
	Workers	Inhalation	Long-term exposure, Systemic effects	220 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Ethanol	Fresh water	0,96 mg/l
	Marine water	0,79 mg/l
	Fresh water sediment	3,6 mg/kg
	Soil	0,63 mg/kg
Myristylalcohol	Fresh water	0,00032 mg/l
	Marine water	0,000032 mg/l
	Fresh water sediment	0,36 mg/kg
	Marine sediment	0,036 mg/kg
	Soil	0,28 mg/kg
	Sewage treatment plant	0,0019 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : If splashes are likely to occur, wear:
Safety glasses with side-shields conforming to EN166

Protective measures : Avoid contact with eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : alcohol-like

Odour Threshold	:	not determined
pH	:	Not applicable
Melting point/freezing point	:	< -5 °C
Decomposition temperature		No data available
Boiling point/boiling range	:	approx. 80 °C literature value
Flash point	:	17 °C Method: DIN EN ISO 13736
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Upper explosion limit / Upper flammability limit	:	15 %(V) Raw material
Lower explosion limit / Lower flammability limit	:	3,1 %(V) Raw material
Vapour pressure	:	approx. 50 hPa (20 °C)
Vapour density	:	No data available
Relative density	:	approx. 0,83 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	in all proportions (20 °C)
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	> 360 °C Raw material
Flow time	:	< 15 s at 20 °C Method: DIN 53211
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2 Other information

Flammability (liquids)	:	Sustains combustion

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.
Reaction with oxidising agents
Exothermic reaction with strong acids.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 10.000 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: 40 mg/l

Acute dermal toxicity : Acute toxicity estimate: > 20.000 mg/kg

Components:

Ethanol:

Acute oral toxicity : LD50 (Mouse): 8.300 mg/kg

Acute inhalation toxicity : LC50 (Mouse): 39 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): 20.000 mg/kg

Myristylalcohol:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Skin corrosion/irritation

Components:

Ethanol:

Species : Rabbit
Result : No skin irritation

Myristylalcohol:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

Serious eye damage/eye irritation

Product:

Assessment : Causes serious eye irritation.
Method : Calculation method

Components:

Ethanol:

Species : Rabbit
Assessment : Causes serious eye irritation.
Method : OECD Test Guideline 405

Myristylalcohol:

Assessment : Irritating to eyes.

Respiratory or skin sensitisation

Components:

Ethanol:

Test Type : Maximisation Test
Species : Guinea pig
Result : Did not cause sensitisation on laboratory animals.

Myristylalcohol:

Species : Guinea pig
Method : OECD Test Guideline 406
Result : Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:

Ethanol:

Genotoxicity in vitro	:	Method: OECD Test Guideline 471 Result: Not mutagenic in Ames Test
Genotoxicity in vivo	:	Remarks: Non mutagenic
Germ cell mutagenicity- Assessment	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Myristylalcohol:

Genotoxicity in vitro	:	Method: OECD Test Guideline 471 Result: Not mutagenic in Ames Test
Germ cell mutagenicity- Assessment	:	Not mutagenic in Ames Test

Carcinogenicity

Components:

Ethanol:

Carcinogenicity - Assessment	:	Did not show carcinogenic effects in animal experiments.

Myristylalcohol:

Carcinogenicity - Assessment	:	Carcinogenicity classification not possible from current data.

Reproductive toxicity

Components:

Ethanol:

Effects on foetal development	:	Species: Rat Application Route: Oral General Toxicity Maternal: NOAEL: 2.000 mg/kg body weight
Reproductive toxicity - Assessment	:	In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance.

Myristylalcohol:

Reproductive toxicity - Assessment	:	Based on available data, the classification criteria are not met.

STOT - single exposure

Components:

Ethanol:

Remarks : No data available

Myristylalcohol:

Remarks : Based on available data, the classification criteria are not met.

STOT - repeated exposure

Components:

Ethanol:

Remarks : No data available

Myristylalcohol:

Remarks : Based on available data, the classification criteria are not met.

Repeated dose toxicity

Components:

Ethanol:

Species	:	Rat
NOAEL	:	1.730 mg/kg
LOAEL	:	3.160 mg/kg
Application Route	:	Oral
Exposure time	:	90 d

Myristylalcohol:

Remarks : No data available

Aspiration toxicity

No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Components:

Ethanol:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8.140 mg/l

Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 5.000 mg/l
Exposure time: 48 h

Toxicity to algae : IC50 (Scenedesmus quadricauda (Green algae)): > 100 mg/l
Exposure time: 72 h

Myristylalcohol:

Toxicity to fish : LC50 (Brachidanio rerio): > 100 mg/l
Method: ISO 7346/2

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 1 - 10 mg/l
Method: OECD Test Guideline 202

Toxicity to algae : (Desmodesmus subspicatus (green algae)): 10 - 100 mg/l
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC: > 1 - 10 mg/l
Species: Brachidanio rerio
Remarks: The toxicological data has been taken from products of similar composition.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 0,001 - 0,01 mg/l
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 1

12.2 Persistence and degradability

Components:

Ethanol:

Biodegradability : Result: Readily biodegradable.

Myristylalcohol:

Biodegradability : Result: Readily biodegradable.

12.3 Bioaccumulative potential

Components:

Ethanol:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: -0,14
Method: Calculated value

Myristylalcohol:

Bioaccumulation : Remarks: Does not significantly accumulate in organisms.

12.4 Mobility in soil

Components:

Ethanol:

Mobility : Remarks: No data available

Myristylalcohol:

Mobility : Remarks: After release, adsorbs onto soil., The product evaporates slowly.

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information : No data is available on the product itself.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of the product according to the defined EWC (European Waste Code) No.

Contaminated packaging : Take empty packaging to the recycling plant.

Waste key for the unused product : EWC 070604

Waste key for the unused product(Group) : Waste material of HZVA from fats, lubricants, soaps, detergents, disinfectants and personal protection products.

SECTION 14: Transport information

14.1 UN number

IMDG : UN 1170

IATA : UN 1170

14.2 UN proper shipping name

IMDG : ETHANOL SOLUTION

IATA : ETHANOL SOLUTION

14.3 Transport hazard class(es)

IMDG : 3

IATA : 3

14.4 Packing group

IMDG

Packing group : II
Labels : 3
EmS Code : F-E, S-D

IATA (Cargo)

Packing instruction (cargo aircraft) : 364
Packing group : II
Labels : Flammable Liquid

IATA (Passenger)

Packing group : II
Labels : Flammable Liquid

14.5 Environmental hazards

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.
For personal protection see section 8.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
P5c FLAMMABLE LIQUIDS

Volatile organic compounds : Volatile organic compounds (VOC) content: 86,4 %
Directive 2010/75/EC on the limitation of emissions of volatile

organic compounds

Other regulations:

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.
Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products

15.2 Chemical safety assessment

Exempt

SECTION 16: Other information

Full text of H-Statements

H225	:	Highly flammable liquid and vapour.
H319	:	Causes serious eye irritation.
H410	:	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evalua-

tion, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008

Flam. Liq. 2, H225	:	On basis of test data.
Eye Irrit. 2, H319	:	Calculation method
Aquatic Chronic 3, H412	:	Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : desderman® pure

Manufacturer or supplier's details

Manufacturer/ Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 2

22851 Norderstedt
Germany
Telephone: +49 (0)40/ 52100-0
Telefax: +49 (0)40/ 52100318
mail@schuelke.com
www.schuelke.com

Emergency telephone number : Carechem 24 International: +44 1865 407333 (only English)

Recommended use of the chemical and restrictions on use

Recommended use : Disinfectants and general biocidal products

Restrictions on use : Restricted to professional users.

2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2

Serious eye damage/eye irritation : Category 2A

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.

Precautionary statements :

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

Vapours are heavier than air and may spread along floors.
Take precautionary measures against static discharges.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Solution of the following substances with harmless additives.

Components

Chemical name	CAS-No.	Concentration (% w/w)
ethanol	64-17-5	>= 70 - < 90
propan-2-ol	67-63-0	>= 10 - < 20
isopropyl myristate	110-27-0	>= 1 - < 2,5
2-phenylphenol (ISO)	90-43-7	>= 0,1 - < 0,25

4. FIRST AID MEASURES

General advice : Take off all contaminated clothing immediately.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.
If eye irritation persists, consult a specialist.

If swallowed : Do NOT induce vomiting.
Clean mouth with water and drink afterwards plenty of water.
If swallowed, seek medical advice immediately and show this container or label.

Most important symptoms and effects, both acute and delayed : Treat symptomatically.
Causes serious eye irritation.

Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Dry powder
Alcohol-resistant foam
Water spray jet
Carbon dioxide (CO2)

Unsuitable extinguishing media	:	Do NOT use water jet.
Specific hazards during fire-fighting	:	Cool closed containers exposed to fire with water spray. Vapours are heavier than air and may spread along floors.
Hazardous combustion products	:	No hazardous combustion products are known
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus. Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation. Remove all sources of ignition.
Environmental precautions	:	Avoid subsoil penetration.
Methods and materials for containment and cleaning up	:	Wipe up with absorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	The hot product gives off combustible vapours. Take measures to prevent the build up of electrostatic charge.
Advice on safe handling	:	Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep away from children.
Conditions for safe storage	:	Store at room temperature in the original container. Keep at temperature not exceeding 25 °C.
Further information on storage conditions	:	Keep away from direct sunlight. Keep container tightly closed.
Materials to avoid	:	Do not store together with oxidising agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ethanol	64-17-5	STEL	1.000 ppm	ACGIH
propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sam-pling time	Permissible concentra-tion	Basis
propan-2-ol	67-63-0	Acetone	Urine	End of shift at end of work-week	40 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : If splashes are likely to occur, wear:
Safety glasses with side-shields conforming to EN166

Protective measures : Avoid contact with eyes.

Hygiene measures : Keep away from food and drink.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless

Odour : alcohol-like

Odour Threshold : not determined

pH : Not applicable

Melting point/freezing point : < -5 °C

Decomposition temperature : No data available

Boiling point/boiling range : ca. 80 °C

Flash point : 16 °C

Method: DIN 51755 Part 1

Evaporation rate : No data available

Flammability (liquids) : Highly flammable liquid and vapour.

Upper explosion limit / Upper flammability limit : 15 %(V)
Raw material

Lower explosion limit / Lower flammability limit	:	3,1 %(V) Raw material
Vapour pressure	:	ca. 50 hPa (20 °C)
Relative vapour density	:	No data available
Density	:	ca. 0,83 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	completely soluble (20 °C)
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	> 360 °C Raw material
Viscosity		
Viscosity, dynamic	:	not determined
Viscosity, kinematic	:	not determined
Flow time	:	< 15 s (20 °C) Method: DIN 53211
Explosive properties	:	Vapours may form explosive mixtures with air.
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Metal corrosion rate	:	None reasonably foreseeable.

10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	The product is chemically stable.
Possibility of hazardous reactions	:	Vapours may form explosive mixture with air. Reaction with oxidising agents Exothermic reaction with strong acids.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Strong acids and oxidizing agents
Hazardous decomposition products	:	None reasonably foreseeable.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity	:	Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: > 40 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method

Components:

ethanol:

Acute oral toxicity	:	LD50 (Mouse): 8.300 mg/kg
Acute inhalation toxicity	:	LC50 (Mouse): 39 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	:	LD50 (Rabbit): 20.000 mg/kg

propan-2-ol:

Acute oral toxicity	:	LD50 (Rat): 5.840 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 39 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	:	LD50 (Rabbit): 13.900 mg/kg Method: OECD Test Guideline 402

isopropyl myristate:

Acute oral toxicity	:	LD50: > 2.000 mg/kg

2-phenylphenol (ISO):

Acute oral toxicity	:	LD50 (Rat): 2.733 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC0 (Rat): > 0,036 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 GLP: yes Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rat): > 5.000 mg/kg Method: OECD Test Guideline 402

Skin corrosion/irritation

Not classified based on available information.

Components:

ethanol:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

propan-2-ol:

Result	:	No skin irritation

2-phenylphenol (ISO):

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

ethanol:

Method	:	OECD Test Guideline 405
Result	:	Eye irritation

propan-2-ol:

Result	:	Eye irritation

2-phenylphenol (ISO):

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

ethanol:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.

propan-2-ol:

Test Type	:	Buehler Test
Species	:	Guinea pig
Result	:	Did not cause sensitisation on laboratory animals.

2-phenylphenol (ISO):

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:

ethanol:

Genotoxicity in vitro	:	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: Not mutagenic in Ames Test
Genotoxicity in vivo	:	Result: Non mutagenic
Germ cell mutagenicity - Assessment	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

propan-2-ol:

Genotoxicity in vitro	:	Test Type: Ames test Method: Mutagenicity (Escherichia coli - reverse mutation assay) Result: Non mutagenic
Genotoxicity in vivo	:	Species: Mouse Method: Mutagenicity (micronucleus test) Result: Non mutagenic
Germ cell mutagenicity - Assessment	:	Not mutagenic in Ames Test

2-phenylphenol (ISO):

Genotoxicity in vitro	:	Test Type: reverse mutation assay Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Rat (male) Application Route: Oral Method: OECD Test Guideline 474 Result: negative
Germ cell mutagenicity - Assessment	:	Not mutagenic in Ames Test

Carcinogenicity

Not classified based on available information.

Components:

ethanol:

Carcinogenicity - Assessment	:	Did not show carcinogenic effects in animal experiments.

propan-2-ol:

Remarks	:	Based on available data, the classification criteria are not met.

2-phenylphenol (ISO):

Species	:	Rat, male
Application Route	:	Oral
Exposure time	:	2 Years
Frequency of Treatment	:	täglich
NOAEL	:	200
Carcinogenicity - Assessment	:	Based on available data, the classification criteria are not met.

Reproductive toxicity

Not classified based on available information.

Components:

ethanol:

Effects on foetal development	:	Species: Rat Application Route: Oral General Toxicity Maternal: NOAEL: 2.000 mg/kg body weight
Reproductive toxicity - Assessment	:	Animal experiments showed mutagenic and teratogenic effects.

propan-2-ol:

Effects on foetal development	:	Species: Rat Application Route: Oral General Toxicity Maternal: NOAEL: 400 mg/kg body weight
Reproductive toxicity - Assessment	:	Based on available data, the classification criteria are not met.

2-phenylphenol (ISO):

Effects on fertility	:	Species: Rat, male and female Application Route: Oral Duration of Single Treatment: 175 d Fertility: NOAEL: >= 500 mg/kg body weight Method: OECD Test Guideline 416 Result: Animal testing did not show any effects on fertility. GLP: yes
Effects on foetal development	:	Species: Rat Application Route: Oral Duration of Single Treatment: 28 d

		Developmental Toxicity: NOAEL: 250 mg/kg body weight Method: OECD Test Guideline 414 Result: No effects on fertility and early embryonic development were detected.
Reproductive toxicity - Assessment	:	Animal testing did not show any effects on foetal development.

STOT - single exposure

Not classified based on available information.

Components:

ethanol:

Remarks	:	No data available

propan-2-ol:

Assessment	:	May cause drowsiness or dizziness.

2-phenylphenol (ISO):

Target Organs	:	Respiratory system
Assessment	:	May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Components:

ethanol:

Remarks	:	No data available

propan-2-ol:

Remarks	:	Based on available data, the classification criteria are not met.

2-phenylphenol (ISO):

Remarks	:	No data available

Repeated dose toxicity

Components:

ethanol:

Species	:	Rat
NOAEL	:	1.730 mg/kg
LOAEL	:	3.160 mg/kg
Application Route	:	Oral
Exposure time	:	90 d

propan-2-ol:

Remarks	:	No data available

2-phenylphenol (ISO):

Species	:	Rat, male and female
NOAEL	:	>= 1.000 mg/kg
Application Route	:	Skin contact
Exposure time	:	21 d
Number of exposures	:	5 d/ week
Method	:	OECD Test Guideline 410
GLP	:	yes
Remarks	:	Subacute toxicity

Species	:	Rat, male
LOAEL	:	200 mg/kg
Application Route	:	Oral
Exposure time	:	2 yr
Method	:	OECD Test Guideline 453
GLP	:	yes

Species	:	Rat, female
LOAEL	:	647 mg/kg
Application Route	:	Oral
Exposure time	:	2 yr
Method	:	OECD Test Guideline 453
GLP	:	yes

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks	:	No human information is available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to microorganisms	:	EC50: 4.000 mg/l Method: OECD 209

Components:

ethanol:

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 8.140 mg/l Exposure time: 48 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 5.000 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	IC50 (Scenedesmus quadricauda (Green algae)): > 100 mg/l Exposure time: 72 h

propan-2-ol:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 9.640 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 10.000 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h Test Type: static test EC50 (green algae): 1.800 mg/l Exposure time: 7 d

2-phenylphenol (ISO):

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 4,5 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 2,7 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 3,57 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Pseudokirchneriella subcapitata (green algae)): 0,468 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	1
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,036 mg/l Exposure time: 21 d Species: Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,009 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1

Persistence and degradability

Product:

Biodegradability	:	Result: Readily biodegradable. Method: OECD 301D / EEC 84/449 C6

Components:

ethanol:

Biodegradability	:	aerobic

		Result: Readily biodegradable. Biodegradation: > 70 % Exposure time: 5 d Method: OECD 301D / EEC 84/449 C6

propan-2-ol:

Biodegradability	:	Result: Readily biodegradable.

isopropyl myristate:

Biodegradability	:	Biodegradation: > 90 % Method: OECD Test Guideline 301B

2-phenylphenol (ISO):

Biodegradability	:	Result: Readily biodegradable. Biodegradation: > 70 % Exposure time: 28 d Method: OECD 301B/ ISO 9439/ EEC 84/449 C5

Bioaccumulative potential

Components:

ethanol:

Bioaccumulation	:	Remarks: Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	log Pow: -0,14 Method: Calculated value

propan-2-ol:

Bioaccumulation	:	Remarks: No bioaccumulation is to be expected (log Pow <= 4).
Partition coefficient: n-octanol/water	:	log Pow: 0,05 (20 °C) Method: OECD Test Guideline 107

isopropyl myristate:

Partition coefficient: n-octanol/water	:	log Pow: > 7

2-phenylphenol (ISO):

Bioaccumulation	:	Bioconcentration factor (BCF): 22 Remarks: Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	log Pow: 3,18 Method: OECD Test Guideline 107

Mobility in soil

Components:

ethanol:

Mobility	:	Remarks: No data available

propan-2-ol:

Mobility	:	Remarks: Mobile in soils

2-phenylphenol (ISO):

Mobility	:	Remarks: No data available
Distribution among environmental compartments	:	log Koc: 2,4 - 2,6

Other adverse effects

Product:

Additional ecological information	:	No data is available on the product itself.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	Disposal together with normal waste is not allowed. Special disposal required according to local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ADR

UN number	:	UN 1987
Proper shipping name	:	ALCOHOLS, N.O.S. (ethanol, propan-2-ol)
Class	:	3
Packing group	:	II
Labels	:	3
Hazard Identification Number	:	33
Tunnel restriction code	:	(D/E)
Environmentally hazardous	:	no

UNRTDG

UN number	:	UN 1987
Proper shipping name	:	ALCOHOLS, N.O.S. (ethanol, propan-2-ol)
Class	:	3
Packing group	:	II
Labels	:	3
Environmentally hazardous	:	no

IATA-DGR

UN/ID No.	:	UN 1987
Proper shipping name	:	Alcohols, n.o.s. (ethanol, propan-2-ol)
Class	:	3

Packing group	:	II
Labels	:	Flammable liquid
Packing instruction (cargo aircraft)	:	364
Packing instruction (passenger aircraft)	:	353

IMDG-Code

UN number	:	UN 1987
Proper shipping name	:	ALCOHOLS, N.O.S. (ethanol, propan-2-ol)
Class	:	3
Packing group	:	II
Labels	:	3
EmS Code	:	F-E, S-D
Marine pollutant	:	no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

This information is not available.

The components of this product are reported in the following inventories:

TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
AIIC	:	On the inventory, or in compliance with the inventory
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL. Hexanoic acid, 2-ethyl-, C16-18-alkyl esters
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory

TECI	:	Not in compliance with the inventory

16. OTHER INFORMATION

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : gigasept® pearls

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub-stance/Mixture : Cleaning agent, Disinfectants

Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 2

22851 Norderstedt
Germany
Telephone: +49 (0)40/ 52100-0
Telefax: +49 (0)40/ 52100318
mail@schuelke.com
www.schuelke.com

E-mail address of person responsible for the SDS/Contact person : Application Department
+49 (0)40/ 521 00 8800
ApplicationDepartment.SM@schuelke.com
(Schülke & Mayr UK Ltd.: +44-1142543500)

1.4 Emergency telephone number

Emergency telephone number : UK Poisons Emergency number: 0870 600 6266

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Serious eye damage, Category 1	H318: Causes serious eye damage.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements : H302 Harmful if swallowed.
H318 Causes serious eye damage.

Precautionary statements : P280 Wear protective gloves/ eye protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.

Hazardous components which must be listed on the label:

15630-89-4 Sodium percarbonate

Special labelling of certain mixtures : Labelling according to Regulation (EC) No. 648/2004: (> 30 % oxygen-based bleaching agents, < 5 % non-ionic surfactants, < 5 % Phosphonates, < 5 % EDTA and salts thereof, enzymes, perfumes)

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
No special risks known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture with the following substances and non dangerous additives.

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Sodium percarbonate	15630-89-4 239-707-6 - - - 01-2119457268-30	Ox. Sol. 2; H272 Acute Tox. 4; H302 Eye Dam. 1; H318	25 - 50
Citric acid	77-92-9 201-069-1 - - - - - -	Eye Irrit. 2; H319	10 - 25
Sodium carbonate	497-19-8 207-838-8 011-005-00-2	Eye Irrit. 2; H319	2,5 - 10

	01-2119485498-19-XXXX		
Disodium EDTA	139-33-3 205-358-3 - - - 01-2119486775-20-XXXX	Acute Tox. 4; H332 STOT RE 2; H373	2,5 - < 10
Tetrasodium EDTA	64-02-8 200-573-9 607-428-00-2 01-2119486762-27-XXXX	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Dam. 1; H318 STOT RE 2; H373	< 2,5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : Move to fresh air.
If unconscious, place in recovery position and seek medical advice.

In case of skin contact : Wash off immediately with soap and plenty of water.
If symptoms persist, call a physician.

In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a specialist.

If swallowed : Rinse mouth with water.
Do NOT induce vomiting.
Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry powder
Foam
Water spray jet
Carbon dioxide (CO2)

Unsuitable extinguishing media	:	Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting	:	none
Hazardous combustion products	:	Oxygen

5.3 Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions	:	Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Use mechanical handling equipment.

6.4 Reference to other sections

see Section 8 + 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Avoid dust formation.
Advice on protection against fire and explosion	:	No special protective measures against fire required.
Hygiene measures	:	Take off all contaminated clothing immediately. Keep away from food and drink.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store at room temperature in the original container.
Further information on storage conditions	:	Store in a dry place. Keep container tightly closed.
Advice on common storage	:	No materials to be especially mentioned.

7.3 Specific end use(s)

Specific use(s)	:	none

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

none

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Sodium carbonate	Workers	Inhalation	Long-term exposure	10 mg/m3
Disodium EDTA	Workers	Inhalation	Short-term exposure	2,5 mg/m3
	Workers	Inhalation	Long-term exposure	2,5 mg/m3
Tetrasodium EDTA	Workers	Inhalation	Short-term exposure	2,5 mg/m3
	Workers	Inhalation	Long-term exposure	2,5 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Citric acid	Fresh water	0,44 mg/l
	Marine water	0,044 mg/l
	Effects on waste water treatment plants	1000 mg/l
	Fresh water sediment	34,6 mg/kg
	Marine sediment	3,46 mg/kg
	Soil	33,1 mg/kg
Disodium EDTA	Fresh water	2,2 mg/l
	Marine water	0,22 mg/l
	Soil	0,72 mg/kg
	Sewage treatment plant	43 mg/l
	Intermittent use/release	1,2 mg/l
Tetrasodium EDTA	Fresh water	2,2 mg/l
	Marine water	0,22 mg/l
	Soil	0,72 mg/kg
	Sewage treatment plant	43 mg/l
	Intermittent use/release	1,2 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection
Directive : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Remarks : Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection.Prolonged contact: Nitrile rubber gloves e.g. Camatril (>480 Min., layer thickness: 0,40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0,70 mm) made by

		KCL or gloves from other manufacturers offering the same protection.
Respiratory protection	:	No personal respiratory protective equipment normally required.
Protective measures	:	Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	granular
Colour	:	light blue
Odour	:	perceptible
Odour Threshold	:	not determined
pH	:	ca. 8 (20 °C) Concentration: 20 g/l in water
Melting point/freezing point	:	not determined
Decomposition temperature		60 °C
Boiling point/boiling range	:	not determined
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	not determined
Lower explosion limit	:	not determined
Vapour pressure	:	Not applicable
Vapour density	:	Not applicable
Bulk density	:	900 kg/m³
Solubility(ies) Water solubility	:	slightly soluble (20 °C)
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	No data available

Viscosity
Viscosity, dynamic : Not applicable

Explosive properties : No data available

Oxidizing properties : No data available

9.2 Other information

Self-ignition : not auto-flammable

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : None reasonably foreseeable.

10.4 Conditions to avoid

Conditions to avoid : Avoid dust formation.
Exposure to moisture

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Calculation method, Harmful if swallowed.

Components:

Sodium percarbonate:
Acute inhalation toxicity : No data available
Acute dermal toxicity : No data available
Citric acid:
Acute inhalation toxicity : No data available
Acute dermal toxicity : No data available
Acute toxicity (other routes of administration) : LD50 intravenous (Mouse): 961 mg/kg
Sodium carbonate:

Acute inhalation toxicity	:	LC50 (Rat): 2,3 mg/l, 2 h, OECD Test Guideline 403
Acute dermal toxicity	:	LD50 (Rabbit): > 2.000 mg/kg
Tetrasodium EDTA:		
Acute inhalation toxicity	:	LC50 (Rat): 1.000 - 5.000 mg/l, 6 h, OECD Test Guideline 403, The toxicological data has been taken from products of similar composition.
Acute dermal toxicity	:	No data available

Skin corrosion/irritation

Product:

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Causes serious eye damage., Calculation method

Respiratory or skin sensitisation

Product:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Product:

Germ cell mutagenicity- Assessment	:	Based on available data, the classification criteria are not met.

Carcinogenicity

Product:

Carcinogenicity - Assessment	:	Based on available data, the classification criteria are not met.

Reproductive toxicity

Product:

Reproductive toxicity - Assessment	:	Based on available data, the classification criteria are not met.

STOT - single exposure

Product:

Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

Based on available data, the classification criteria are not met.

Repeated dose toxicity

Components:

Citric acid:
Rat, NOAEL: 1.200 mg/kg, Oral

Aspiration toxicity

No data available

Further information

Product:

No data is available on the product itself.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Sodium percarbonate:

Toxicity to fish	:	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available
Toxicity to algae	:	Remarks: No data available

Citric acid:

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 440 - 760 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 85 - 120 mg/l Exposure time: 72 h
Toxicity to algae	:	IC5 (Scenedesmus quadricauda (Green algae)): 640 mg/l

Sodium carbonate:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 300 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 200 - 227 mg/l Exposure time: 48 h
Toxicity to algae	:	Remarks: No data available

Tetrasodium EDTA:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): > 100 mg/l Exposure time: 48 h Method: DIN 38412
Toxicity to algae	:	EC50 : > 100 mg/l Exposure time: 72 h Test Type: Growth inhibition

Toxicity to fish (Chronic toxicity)	:	NOEC: > 36,9 mg/l Exposure time: 35 d Species: Brachidanio rerio Method: OECD Test Guideline 210 Remarks: The toxicological data has been taken from products of similar composition.
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 25 mg/l Exposure time: 21 d Species: Daphnia (water flea) Method: OECD Test Guideline 211 Remarks: The toxicological data has been taken from products of similar composition.

12.2 Persistence and degradability

Components:

Sodium percarbonate:

Biodegradability	:	Remarks: No data available

Citric acid:

Biodegradability	:	Result: Readily biodegradable. Method: OECD Test Guideline 301B

Sodium carbonate:

Biodegradability	:	Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

Tetrasodium EDTA:

Biodegradability	:	Result: Not rapidly biodegradable Remarks: According to OECD criteria, the product is inherently biodegradable.

12.3 Bioaccumulative potential

Components:

Sodium percarbonate:

Bioaccumulation	:	Remarks: No data available

Citric acid:

Bioaccumulation	:	Remarks: No bioaccumulation is to be expected (log Pow <= 4).
Partition coefficient: n-octanol/water	:	log Pow: -1,72

Sodium carbonate:

Bioaccumulation	:	Remarks: Does not bioaccumulate.

Tetrasodium EDTA:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Exposure time: 28 d
Bioconcentration factor (BCF): 1,8
Remarks: Does not significantly accumulate in organisms.

12.4 Mobility in soil

Components:

Sodium percarbonate:

Mobility : Remarks: No data available

Citric acid:

Mobility : Remarks: No data available

Sodium carbonate:

Mobility : Remarks: No data available

Tetrasodium EDTA:

Mobility : Remarks: Substance does not evaporate from water surface into the atmosphere., Adsorption to solid soil phase is possible.

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information : No data is available on the product itself.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of with domestic refuse.

Contaminated packaging : Take empty packaging to the recycling plant.

Waste key for the unused product	:	European waste catalog (EWC) 070699
Waste key for the unused product(Group)	:	Waste material of HZVA from fats, lubricants, soaps, detergents, disinfectants and personal protection products.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable
For personal protection see section 8.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EC) No 850/2004 on persistent organic pollutants	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Not applicable

Volatile organic compounds	:	Remarks: none, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

15.2 Chemical safety assessment

Exempt

SECTION 16: Other information

Full text of H-Statements

H272	:	May intensify fire; oxidizer.
H302	:	Harmful if swallowed.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H332	:	Harmful if inhaled.
H373	:	May cause damage to organs through prolonged or repeated exposure if inhaled.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Ox. Sol.	:	Oxidizing solids
STOT RE	:	Specific target organ toxicity - repeated exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008

Acute Tox. 4, H302	:	Calculation method
Eye Dam. 1, H318	:	Calculation method

Changes compared with the previous edition!!!

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Z_Z / EN

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : mikrozid® AF liquid

Manufacturer or supplier's details

Manufacturer/ Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 2

22851 Norderstedt
Germany
Telephone: +49 (0)40/ 52100-0
Telefax: +49 (0)40/ 52100318
mail@schuelke.com
www.schuelke.com

Emergency telephone number : Carechem 24 International: +44 1865 407333 (only English)

Recommended use of the chemical and restrictions on use

Recommended use : Disinfectants and general biocidal products

2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3

Serious eye damage/eye irritation : Category 2A

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements :

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours/ spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

Vapours may form explosive mixtures with air.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Solution of the following substances with harmless additives.

Components

Chemical name	CAS-No.	Concentration (% w/w)
propan-1-ol	71-23-8	>= 30 - < 50
ethanol	64-17-5	>= 20 - < 30

4. FIRST AID MEASURES

General advice : Take off all contaminated clothing immediately.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : Wash off with plenty of water.
If symptoms persist, call a physician.

In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Obtain medical attention.

If swallowed : Do NOT induce vomiting.
Clean mouth with water and drink afterwards plenty of water.
Obtain medical attention.

Most important symptoms and effects, both acute and delayed : Treat symptomatically.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Dry powder

Alcohol-resistant foam
Carbon dioxide (CO2)
Water spray jet

Unsuitable extinguishing media : Do NOT use water jet.

Specific hazards during fire-fighting : Vapours may form flammable mixture with air
Cool closed containers exposed to fire with water spray.

Hazardous combustion products : No hazardous combustion products are known

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
Remove all sources of ignition.

Environmental precautions : Avoid subsoil penetration.

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.
The hot product gives off combustible vapours.

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.

Conditions for safe storage : Store at room temperature in the original container.
Do not store at temperatures above 30°C.

Further information on storage conditions : Keep container tightly closed.
Keep away from direct sunlight.
Recommended storage temperature: 15 - 25°C

Materials to avoid : Do not store together with oxidising agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propan-1-ol	71-23-8	TWA	100 ppm	ACGIH
ethanol	64-17-5	STEL	1.000 ppm	ACGIH

Personal protective equipment

Respiratory protection	:	No personal respiratory protective equipment normally required. If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time. Recommended Filter type: A-P2 or ABEK-P2 Respiratory protection complying with EN 141. No personal respiratory protective equipment normally required.
Hand protection		
Directive	:	The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
Remarks	:	Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Nitrile rubber gloves e.g. Camatril (>120 Min., layer thickness: 0.40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0.70 mm) made by KCL or gloves from other manufacturers offering the same protection.
Eye protection	:	Safety glasses with side-shields conforming to EN166
Skin and body protection	:	Work uniform or laboratory coat.
Protective measures	:	Avoid contact with skin and eyes.
Hygiene measures	:	Keep away from food and drink.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	colourless
Odour	:	alcohol-like
Odour Threshold	:	not determined
pH	:	Not applicable
Melting point/freezing point	:	< -5 °C
Decomposition temperature		No data available

Boiling point/boiling range	:	ca. 80 °C
Flash point	:	27 °C Method: DIN 51755 Part 1
Evaporation rate	:	No data available
Flammability (liquids)	:	Flammable liquid and vapour.
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	17,5 %(V) Raw material
Lower explosion limit / Lower flammability limit	:	2,1 %(V) Raw material
Vapour pressure	:	ca. 50 hPa (20 °C)
Relative vapour density	:	No data available
Density	:	ca. 0,89 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	completely soluble (20 °C)
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	425 °C Raw material
Viscosity		
Viscosity, dynamic	:	not determined
Viscosity, kinematic	:	not determined
Flow time	:	< 15 s (20 °C) Method: DIN 53211
Explosive properties	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Metal corrosion rate	:	None reasonably foreseeable.

10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	The product is chemically stable.

Possibility of hazardous reactions	:	Vapours may form explosive mixture with air.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Strong acids and oxidizing agents
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute inhalation toxicity	:	Acute toxicity estimate: > 40 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method

Components:

propan-1-ol:

Acute oral toxicity	:	LD50 (Rat): ca. 8.000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 33,8 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403
Acute dermal toxicity	:	LD50 (Rabbit): 4.032 mg/kg Method: literature value

ethanol:

Acute oral toxicity	:	LD50 (Mouse): 8.300 mg/kg
Acute inhalation toxicity	:	LC50 (Mouse): 39 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	:	LD50 (Rabbit): 20.000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

propan-1-ol:

Species	:	Rabbit
Result	:	No skin irritation

ethanol:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Method	:	Expert judgement
Result	:	irritating
Remarks	:	The toxicological data has been taken from products of similar composition.

Components:

propan-1-ol:

Species	:	Rabbit
Result	:	Irreversible effects on the eye

ethanol:

Method	:	OECD Test Guideline 405
Result	:	Eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

propan-1-ol:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.

ethanol:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:

propan-1-ol:

Germ cell mutagenicity - Assessment	:	Not mutagenic in Ames Test

ethanol:

Genotoxicity in vitro	:	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: Not mutagenic in Ames Test
Genotoxicity in vivo	:	Result: Non mutagenic
Germ cell mutagenicity - Assessment	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Not classified based on available information.

Components:

propan-1-ol:

Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

ethanol:

Carcinogenicity - Assessment	:	Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Not classified based on available information.

Components:

propan-1-ol:

Effects on foetal development	:	Species: Rat Application Route: inhalation (vapour) General Toxicity Maternal: NOAEL: 8,6 mg/l
Reproductive toxicity - Assessment	:	Animal testing did not show any effects on fertility.

ethanol:

Effects on foetal development	:	Species: Rat Application Route: Oral General Toxicity Maternal: NOAEL: 2.000 mg/kg body weight
Reproductive toxicity - Assessment	:	Animal experiments showed mutagenic and teratogenic effects.

STOT - single exposure

May cause drowsiness or dizziness.

Components:

propan-1-ol:

Assessment	:	May cause drowsiness or dizziness.

ethanol:

Remarks	:	No data available

STOT - repeated exposure

Not classified based on available information.

Components:

propan-1-ol:

Assessment	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

ethanol:

Remarks	:	No data available

Repeated dose toxicity

Components:

ethanol:

Species	:	Rat
NOAEL	:	1.730 mg/kg
LOAEL	:	3.160 mg/kg
Application Route	:	Oral
Exposure time	:	90 d

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks	:	Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to microorganisms	:	EC50: 68.750 mg/l Method: OECD 209

Components:

propan-1-ol:

Toxicity to fish	:	LC50 (Fish): 3.200 mg/l

		Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 3.642 mg/l Exposure time: 48 h Method: DIN 38412
Toxicity to algae/aquatic plants	:	NOEC (Chlorella pyrenoidosa (algae)): 1.150 mg/l Exposure time: 48 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 68,3 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Remarks: Based on data from similar materials

ethanol:

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 8.140 mg/l Exposure time: 48 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 5.000 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	IC50 (Scenedesmus quadricauda (Green algae)): > 100 mg/l Exposure time: 72 h

Persistence and degradability

Product:

Biodegradability	:	Result: Readily biodegradable. Method: OECD 301D / EEC 84/449 C6

Components:

propan-1-ol:

Biodegradability	:	aerobic Result: Readily biodegradable. Biodegradation: 75 % Exposure time: 20 d

ethanol:

Biodegradability	:	aerobic Result: Readily biodegradable. Biodegradation: > 70 % Exposure time: 5 d Method: OECD 301D / EEC 84/449 C6

Bioaccumulative potential

Components:

propan-1-ol:

Bioaccumulation	:	Bioconcentration factor (BCF): 0,88 Remarks: Bioaccumulation is unlikely.
Partition coefficient: n-	:	log Pow: 0,2 (25 °C)

octanol/water		Method: OECD Test Guideline 117

ethanol:

Bioaccumulation	:	Remarks: Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	log Pow: -0,14 Method: Calculated value

Mobility in soil

Components:

propan-1-ol:

Mobility	:	Remarks: Mobile in soils

ethanol:

Mobility	:	Remarks: No data available

Other adverse effects

Product:

Additional ecological information	:	No data is available on the product itself.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	Disposal together with normal waste is not allowed. Special disposal required according to local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ADR

UN number	:	UN 1987
Proper shipping name	:	ALCOHOLS, N.O.S. (propan-1-ol, ethanol)
Class	:	3
Packing group	:	III
Labels	:	3
Hazard Identification Number	:	30
Tunnel restriction code	:	(D/E)
Environmentally hazardous	:	no

UNRTDG

UN number	:	UN 1987
Proper shipping name	:	ALCOHOLS, N.O.S. (propan-1-ol, ethanol)
Class	:	3
Packing group	:	III

Labels	:	3
Environmentally hazardous	:	no

IATA-DGR

UN/ID No.	:	UN 1987
Proper shipping name	:	Alcohols, n.o.s. (propan-1-ol, ethanol)
Class	:	3
Packing group	:	III
Labels	:	Flammable liquid
Packing instruction (cargo aircraft)	:	366
Packing instruction (passenger aircraft)	:	355

IMDG-Code

UN number	:	UN 1987
Proper shipping name	:	ALCOHOLS, N.O.S. (propan-1-ol, ethanol)
Class	:	3
Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-D
Marine pollutant	:	no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

This information is not available.

The components of this product are reported in the following inventories:

TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	All substances listed as active on the TSCA inventory
AIIC	:	All components are listed on the inventory, regulatory obligations/restrictions apply
DSL	:	All components of this product are on the Canadian DSL
ENCS	:	On the inventory, or in compliance with the inventory
ISHL	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory

PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

16. OTHER INFORMATION

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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