

Safety data sheet

according to 1907/2006/EC, Article 31 & 2020/878/EC

Printing date 12.04.2023

Version number 1

Revision: 12.04.2023

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

1.1 Product identifier

Trade name: **FINEAMIN 06 C**

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

- Sector of Use** SU21 Consumer uses: Private households / general public / consumers
- Application of the substance / the preparation** : Additive for steam boilers and closed circuits

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

h2o facilities sa
av. des Grandes-Communes 8
CH-1213 Petit-Lancy, Geneve
Tel. +41-22-879 9500
Fax +41-22-879 9509
info@h2o-f.ch

1.4 Emergency telephone number:

France (INRS 24h/24) - Tel : +33 (0)1 45 42 59 59
Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24) EU Tel: 112
Belgium - Brüssel: +32 070/245 245
UK : Call NHS 999 in a medical emergency. If you urgently need medical help or advice but it's not a life-threatening situation, call 111 (24/7). The NHS 111 number is currently only available in certain areas. If you're outside of these areas, you should call NHS Direct on 0845 4647
Swiss Toxicological Information Centre (Zürich) : +41 44 251 51 51 / www.toxi.ch.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 :



GHS08 health hazard

Repr. 2 H361f Suspected of damaging fertility.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

STOT SE 3 H335 May cause respiratory irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

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Hazard pictograms



Signal word Danger

Hazard-determining components of labelling:

cyclohexylamine
(Z)-N-9-octadecenylpropane-1,3-diamine
2-aminoethanol

Hazard statements

H314 Causes severe skin burns and eye damage.
H361f Suspected of damaging fertility.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
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.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

The mixture shall not contain substances listed in accordance with Article 59(1) of UK REACH as having endocrine disrupting properties, or be recognised as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in a concentration equal to or greater than 0.1%.

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture: consisting of the following components.

Dangerous components:

CAS: 108-91-8	cyclohexylamine	25-30%
EINECS: 203-629-0	Flam. Liq. 3, H226; Repr. 2, H361f; Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312	
Index number: 612-050-00-6		
RTECS: GX 0700000		
Reg.nr.: 01-2119486803-29-0002		
CAS: 141-43-5	2-aminoethanol	5-10%
EINECS: 205-483-3	Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Aquatic Chronic 3, H412	
Index number: 603-030-00-8		
RTECS: KJ 5775000	Specific concentration limit: STOT SE 3; H335: C ≥ 5 %	
Reg.nr.: 01-2119486455-28-xxxx		
CAS: 7173-62-8	(Z)-N-9-octadecenylpropane-1,3-diamine	2.5% - 5%
EINECS: 230-528-9	STOT RE 1, H372; Skin Corr. 1B, H314; Aquatic Chronic 1, H410 (M=1); Acute Tox. 4, H302	
Reg.nr.: 01-2119487002-46-xxxx		

Additional information: For the wording of the listed risk phrases, refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation:

In case of unconsciousness place patient in a stable laying down side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed :

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed :

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture : No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures :

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow the product to enter sewers/ surface water or ground water.

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- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections :**
See Section 7 for information on safe handling.
See Section 8 for information on personal protective equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling :**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:**
Protect from frost.
Keep container tightly sealed.
- **7.3 Specific end use(s) :** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**

CAS: 108-91-8 cyclohexylamine (25-30%)

WEL (Great Britain) Long-term value: 41 mg/m³, 10 ppm
MAK (Switzerland) Short-term value: 24.6 mg/m³, 6 ppm
Long-term value: 8.2 mg/m³, 2 ppm
SSc;

CAS: 141-43-5 2-aminoethanol (5-10%)

WEL (Great Britain) Short-term value: 7.6 mg/m³, 3 ppm
Long-term value: 2.5 mg/m³, 1 ppm
Sk

IOELV (EU) Short-term value: 7.6 mg/m³, 3 ppm
Long-term value: 2.5 mg/m³, 1 ppm
Skin

MAK (Switzerland) Short-term value: 10 mg/m³, 4 ppm
Long-term value: 5 mg/m³, 2 ppm
S;

- **DNELs**

CAS: 7173-62-8 (Z)-N-9-octadecenylpropane-1,3-diamine

Dermal DNEL Worker long-term systemic 0.01 mg/kg bw/d
Inhalative DNEL Worker long-term systemic 0.035 mg/m³

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· PNECs

CAS: 7173-62-8 (Z)-N-9-octadecenylpropane-1,3-diamine

PNEC STP 0.251 mg/L

PNEC aqua (fresh water) 0.01 mg/L

PNEC aqua (intermittent releases) 0.001 mg/L

PNEC aqua (marine water) 0.001 mg/L

PNEC sediment (fresh water) 1.72 mg/kg

PNEC sediment (marine water) 0.172 mg/kg

PNEC soil 10 mg/kg

· Additional information:

The most current valid lists have been used as a basis for the production of this document.

· 8.2 Exposure controls

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Keep away from food, beverages and petfood.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Hand protection**


Protective gloves

· **Gloves material :** Nitrile rubber, NBR

· **Eye/face protection**


Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· **General Information**

· **Physical state** Liquid

· **Form:** Liquid

· **Colour:** Colourless

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **Melting point/freezing point:** -10 °C

· **Boiling point or initial boiling point and boiling range** 100 °C

· **Flammability** Not applicable.

· **Lower and upper explosion limit**

· **Lower:** Not determined.

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- **Upper:** Not determined.
- **Flash point:** Not applicable.
- **Auto-ignition temperature:** Not applicable.
- **Decomposition temperature:** Not determined.
- **pH at 20 °C** >13
- **Viscosity:**
- **Kinematic viscosity** Not determined.
- **Kinematic:**
- **Dynamic:** Not determined.
- **Solubility**
- **water:** Fully miscible.
- **Partition coefficient n-octanol/water (log value)** Not determined.
- **Vapour pressure:** Not determined.
- **Vapour pressure:**
- **Density and/or relative density**
- **Density at 20 °C:** 0.96 - 1.10 g/cm³
- **Relative density :** Not determined.
- **Vapour density :** Not determined.

- **9.2 Other information :**
- **Important information on protection of health and environment, and on safety.**
- **Ignition temperature:** Product is not self igniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Solvent content:**
- **COV (CH) :** 0.00 %
- **Change in condition**
- **Evaporation rate :** Not determined.

- **Information with regard to physical hazard classes**
- **Explosives** Not classified as hazardous
- **Flammable gases** Not classified as hazardous
- **Aerosols** Not classified as hazardous
- **Oxidising gases** Not classified as hazardous
- **Gases under pressure** Not classified as hazardous
- **Flammable liquids** Not classified as hazardous
- **Flammable solids** Not classified as hazardous
- **Self-reactive substances and mixtures** Not classified as hazardous
- **Pyrophoric liquids** Not classified as hazardous
- **Pyrophoric solids** Not classified as hazardous
- **Self-heating substances and mixtures** Not classified as hazardous
- **Substances and mixtures, which emit flammable gases in contact with water** Not classified as hazardous
- **Oxidising liquids** Not classified as hazardous
- **Oxidising solids** Not classified as hazardous
- **Organic peroxides** Not classified as hazardous
- **Corrosive to metals** Not classified as hazardous
- **Desensitised explosives** Not classified as hazardous

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SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions :** No dangerous reactions known.
- **10.4 Conditions to avoid :** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:**
- **CAS: 108-91-8 cyclohexylamine**
Oral LD50 156 mg/kg (rat)
Dermal LD50 277 mg/kg (rabbit)
- **CAS: 141-43-5 2-aminoethanol**
Oral LD50 2,050 mg/kg (rat)
Dermal LD50 1,000 mg/kg (rabbit)
- **On the skin:** Causes severe skin burns and eye damage.
- **On the eyes:** Causes serious eye damage.
- **Respiratory or skin sensitization** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity**
Suspected of damaging fertility.
- **STOT-single exposure**
May cause respiratory irritation.
- **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties**
- None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability :** 70% biodegradable
- **12.3 Bioaccumulative potential :** No further relevant information available.
- **12.4 Mobility in soil :** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects** : No further relevant information available.
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
 Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.
 Must not reach sewage water or drainage ditch undiluted or unneutralised.
 Danger to drinking water if even extremely small quantities leak into the ground.
 Harmful to aquatic organisms

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation :**



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
 HP8 Corrosive
 HP10 Toxic for reproduction
 HP14 Ecotoxic

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN number or ID number**
- **DOT, ADR, IMDG, IATA** UN3267
- **14.2 UN proper shipping name**
- **ADR** UN3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CYCLOHEXYLAMINE)
- **IMDG** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CYCLOHEXYLAMINE)
- **IATA** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (containing CYCLOHEXYLAMINE)
- **14.3 Transport hazard class(es)**
- **ADR**



- **Class** 8 (C7) Corrosive substances.

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· Label	8
· IMDG, IATA	
	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	
· ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Hazard identification number (Kemler code):	80
· EMS Number:	F-A,S-B
· Segregation groups	(SGG18) Alkalis
· Stowage Category	A
· Stowage Code	SW2 Clear of living quarters.
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.

· Transport/Additional information:

· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	E

· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CYCLOHEXYLAMINE), 8, III

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.

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- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
None of the ingredients is listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**
None of the ingredients is listed.
- **Regulation (EC) No 273/2004 on drug precursors**
None of the ingredients is listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Classification in accordance with Delegated Regulation (EU) 2022/692 of 16 February 2022 adapting to technical and scientific progress GB CLP for the 18th time and amending table 3 of Annex VI part 3 of Regulation (EC) 1272/2008.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

- **Relevant phrases**
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H332 Harmful if inhaled.
H361f Suspected of damaging fertility.
H372 Causes damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

· **Classification according to Regulation (EC) No 1272/2008**

Skin corrosion/irritation Serious eye damage/irritation Reproductive toxicity Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
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· **Date of previous version:** 12.04.2023

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)

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VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)
 DNEL: Derived No-Effect Level (UK REACH)
 PNEC: Predicted No-Effect Concentration (UK REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 3: Flammable liquids – Category 3
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Repr. 2: Reproductive toxicity – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

— GB —