

	<b>ALCO QUALITY ASSURANCE LABORATORY</b> <b>TEST REPORT</b> Accreditation No: AZS ISO/IEC 17025:2020/AZ 01.0571.01.21	
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**Company:** ALCO LLC  
3, Vali Mammadov st., Sabail dist.  
AZ1095, Baku, Azerbaijan

**Certificate No.:** 2025396  
**Date of issue:** 06/03/2025

### Test sample

**Product:** AVTOIL M-10Г2K  
**Batch number:** 2503396  
**Tank ID:** T45.4

**Manufacture date:** 06/03/2025  
**Date of sampling:** 06/03/2025  
**Date of analysis:** 06/03/2025

### Test result

Parameters	Unit	Test method	Limit	Test result
Appearance	-	Visual	Bright & Clear	Bright & Clear
Kinematic viscosity at 100 °C	mm <sup>2</sup> /s	GOST 33	10.5-11.5	10.57
Viscosity index	-	GOST 25371	Min. 85	101
Water content	%	GOST 2477	Max. 0.05	None
Pour Point	°C	GOST 20287	Max. -15	-21
Color, with a dilution of 15:85, units of the CNT	-	GOST 20284	Max. 4.0	0.8
Density - at 15 °C - at 20 °C	g/cm <sup>3</sup>	GOST 3900	Test & Report Max. 0.905	0.8858 0.8814

*ALCO QUALITY ASSURANCE LABORATORY accredited by AzAK for AZS ISO/IEC 17025:2020 at test laboratory.*

**Shelf life:** 5 years from the date of manufacture of the product if proper storage conditions are followed.

This product meets the specification set out in its product data sheet (PDS) and has been manufactured in a facility fully complying with the requirements of Integrated Management System standards.

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**Approved by**



**Aytan Allahverdiyeva**  
**Head of Laboratory**





# Turbo Evolution 10W-40

## SPECIFICATIONS

Engine:	gasoline, diesel
SAE:	10W-40
API:	CI-4 / SL
ACEA:	A3/B4 / E7

## APPROVALS AND CONFORMITY

MB-Approval 228.3    Volvo VDS-3    Mack EO-M Plus / EO-N RENAULT VI, RLD-2

MB 229.1    MAN M 3275    Cummins CES 20071/-72/-75/-76/-77/-78    MTU 2    IVECO

Caterpillar ECF-1-a, ECF-2    ALLISON C-4    Voith Retarder Typ A

## CHARACTERISTICS

- Full Saps technology;
- Low evaporation and high stability;
- Excellent viscosity-temperature behaviour;
- Reduces formation of ageing products at high temperatures;
- Optimal protection against corrosion, oxidation, wear and foaming;
- Extremely high pressure susceptibility;
- Highest wear protection.

## EFFECTS

- Meets the requirements of ecological standards EURO 3/4/5;
- All-year-round operation;
- Easy start in cold season;
- Provides lower fuel consumption;
- Excellent viscosity characteristics even during extended drain intervals;
- Prevents black sludge formation;
- Protection against reflector surface formation;
- Minimum wear at highly strained engines;
- Versatility, which reduces the number of varieties of consumed oil for mixed fleets.

## DISPOSAL

- Wolver Turbo Evolution SAE 10W-40 is assigned to category 2 of used oils and thus is free for disposal.

## TYPICALS

Kinematic viscosity at 100 °C, mm <sup>2</sup> /s	14.9
Viscosity index, -	165
Pour point, °C	-34
Viscosity CCS at -20 °C, mPa·s	6400
TBN, mgKOH/g	10.5
Flash point , °C	228
Density at 15.6 °C, kg/m <sup>3</sup>	863

## DESCRIPTION

Wolver Turbo Evolution 10W-40 is a highly effective semi-synthetic engine oil of a new level of modern vehicles and stationary engines, which is a product of the evolution of API CI-4 oil (2002 publication) to higher requirements of ACEA E7 (2016 revision).

Wolver Turbo Evolution 10W-40 is produced with the use of an advanced and balanced additive package - Stable Protect, which allows to ensure optimum productivity, thermal, viscosity and antioxidant stability during a long period of exploitation.

Wolver Turbo Evolution 10W-40 is especially effective in engines of commercial vehicles, medium-loaded engines of main trucks, agricultural and quarry equipment. Complies with the current environmental standards EURO 5/4/3 and can be used in engines with EGR and / or SCR exhaust gas cleaning technologies without a particulate filter.

## Application

- Commercial vehicle diesel engines
  - with turbocharging;
  - with catalyst technology;
  - with EGR technology;
  - with SCR technology.
- Passenger car diesel engines
  - with turbocharging;
  - with catalyst technology.

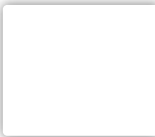


- Four-stroke petrol engine
  - with turbocharging;
  - with multivalve technology;
  - with catalyst technology.

**Miscibility**

Wolver Turbo Evolution SAE 10W-40 is fully compatible to comparable lubrications and can be mixed without any doubts. However, it is recommended to take Wolver Turbo Evolution SAE 10W-40 when refilling.

20L - Pail	4398	426036094398
60L - Barrel	4400	426036094400
208L - Barrel	4399	426036094399



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**Company:** ALCO LLC  
 3, Vali Mammadov st., Sabail dist.  
 AZ1095, Baku, Azerbaijan

**Certificate No.:** 20241041  
**Date of issue:** 05/07/2024

### Test sample

**Product:** AVTOIL INDUSTRIAL HYDRAULIC I-40A  
**Batch number:** 24071041  
**Tank ID:** T45.2

**Manufacture date:** 02/07/2024  
**Date of sampling:** 02/07/2024  
**Date of analysis:** 02/07/2024

### Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 40 °C	mm <sup>2</sup> /s	ASTM D445	61.0-75.0	62.31	Pass
TAN	mg KOH/g	ASTM D974	Max. 0.05	0.003	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Flash Point, COC	°C	ASTM D92	Min. 220	232	Pass
Pour Point	°C	ASTM D97	Max. -15	<-18	Pass
Color	-	ASTM D1500	Max. 3.0	1.0	Pass
Density at 15 °C	g/cm <sup>3</sup>	ASTM D4052	Test&Report	0.8770	Pass

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**Shelf life:** 5 years from the date of manufacture of the product if proper storage conditions are followed.

This product meets the specification set out in its product data sheet (PDS) and has been manufactured in a facility fully complying with the requirements of Integrated Management System standards.

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**Authorised singnatory**





Allahverdiyeva Aytan  
Head of Laboratory



Isgandarli Nazrin  
Lead Chemical Engineer



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**Company:** ALCO LLC  
3, Vali Mammadov st., Sabail dist.  
AZ1095, Baku, Azerbaijan

**Certificate No.:** 2024314  
**Date of issue:** 05/03/2024

**Test sample**

**Product:** AVTOIL 85W140 GL-5  
**Batch number:** 2402314  
**Tank ID:** T41.4

**Manufacture date:** 27/02/2024  
**Date of sampling:** 27/02/2024  
**Date of analysis:** 27/02/2024

**Test result**



Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 100 °C	mm <sup>2</sup> /s	ASTM D445	24.0-32.5	26.34	Pass
Viscosity index	-	ASTM D2270	Min. 90	105	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Flash Point, COC	°C	ASTM D92	Min. 200	256	Pass
Pour Point	°C	ASTM D97	Max. -18	-21	Pass
Color	-	ASTM D1500	Test & Report	4.3	Pass
Density at 20 °C	g/cm <sup>3</sup>	ASTM D4052	Test & Report	0.8924	Pass

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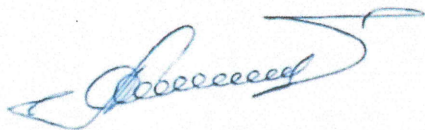
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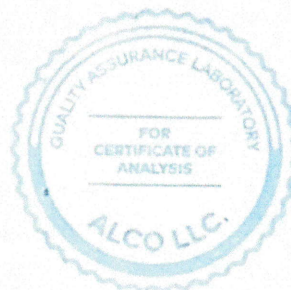
**Authorised singnatory**



**Allahverdieva Aytan**  
**Head of Laboratory**



**Isgandarli Nazrin**  
**Chemical Engineer**



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**Company:** ALCO LLC  
 3, Vali Mammadov st., Sabail dist.  
 AZ1095, Baku, Azerbaijan

**Certificate No.:** 2024529  
**Date of issue:** 09/04/2024

### Test sample

**Product:** AVTOIL ATF II red  
**Batch number:** 2404529  
**Tank ID:** T41.4

**Manufacture date:** 09/04/2024  
**Date of sampling:** 09/04/2024  
**Date of analysis:** 09/04/2024

### Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 100 °C	mm <sup>2</sup> /s	ASTM D445	Min. 7.000	7.24	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Flash Point, COC	°C	ASTM D92	Min. 185	238	Pass
Pour Point	°C	ASTM D97	Max. -40	<-43	Pass
Color	-	ASTM D1500	RED	RED	Pass
Density at 15 °C	g/cm <sup>3</sup>	ASTM D4052	Test & Report	0.8673	Pass

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**Allahverdiyeva Aytan**  
**Head of Laboratory**



**Isgandarli Nazrin**  
**Lead Chemical Engineer**



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**Company:** ALCO LLC  
 3, Vali Mammadov st., Sabail dist.  
 AZ1095, Baku, Azerbaijan

**Certificate No.:** 20241078  
**Date of issue:** 09/07/2024

### Test sample

**Product:** AVTOIL TAD 17 85W90 GL-5  
**Batch number:** 24071078  
**Tank ID:** T45.1

**Manufacture date:** 09/07/2024  
**Date of sampling:** 09/07/2024  
**Date of analysis:** 09/07/2024

### Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 100 °C	mm <sup>2</sup> /s	ASTM D445	Min. 17.50	18.11	Pass
Viscosity Index	-	ASTM D1500	Min. 100	104	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Flash Point, COC	°C	ASTM D92	Min. 200	236	Pass
Pour Point	°C	ASTM D97	Max. -25	-35	Pass
Color	-	ASTM D1500	Test & Report	4.1	Pass
Density at 15°C	g/cm <sup>3</sup>	ASTM D4052	Test & Report	0.8896	Pass

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**Head of Laboratory**

Isgandarli Nazrin  
**Lead Chemical Engineer**

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**Company:** ALCO LLC  
3, Vali Mammadov st., Sabail dist.  
AZ1095, Baku, Azerbaijan

**Certificate No.:** 2025384  
**Date of issue:** 03/03/2025

### Test sample

**Product:** AVTOIL MOTOTECH 2T TC  
**Batch number:** 2503384  
**Tank ID:** T41.4

**Manufacture date:** 03/03/2025  
**Date of sampling:** 03/03/2025  
**Date of analysis:** 03/03/2025

### Test result

Parameters	Unit	Test method	Limit	Test result
Appearance	-	Visual	Bright & Clear	Bright & Clear
Kinematic viscosity at 100 °C	mm <sup>2</sup> /s	ASTM D445	Min. 6.0	8.88
Viscosity index	-	ASTM D2270	Min. 95	100
Water content	%	ASTM D95	Max. 0.05	None
Pour Point	°C	ASTM D7346	Max. -15	-18
Color	-	ASTM D1500	RED	RED
Density at 15 °C	g/cm <sup>3</sup>	ASTM D4052	Test & Report	0.8768

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**Company:** ALCO LLC  
3, Vali Mammadov st., Sabail dist.  
AZ1095, Baku, Azerbaijan

**Certificate No.:** 2024016  
**Date of issue:** 01/07/2024

### Test sample

**Product:** AVTOIL Solidol  
**Batch number:** G202408016  
**Tank ID:** T41.3

**Manufacture date:** 01/07/2024  
**Date of sampling:** 01/07/2024  
**Date of analysis:** 01/07/2024

### Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Homogeneous ointment without lumps, from light yellow to dark brown		Pass
Dropping temperature	°C	GOST 6793	Min. 78	82	Pass
Penetration at 25°C with stirring 60 double cycles	mm <sup>-1</sup>	GOST 5346 method B	230-300	288	Pass
Viscosity effective and average strain rate gradient, 10c <sup>-1</sup> - at 0°C temperature	Pa	GOST 7163	Max. 750	455	Pass
Strength limit at 50°C	Pa	GOST 7143 method B	Min. 70	140	Pass
Mass fraction of free alkali in NaOH	%	GOST 6707	Max. 0.2	0.10	Pass
Organic acid content	%	GOST 6707	None	None	Pass
Water content	%	GOST 2477	Max. 2.5	1.6	Pass
Mechanical impurities content, insoluble in hydrochloric acid	%	GOST 6479	Max. 0.15	None	Pass

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**Head of Laboratory**



**Isgandarli Nazrin**  
**Lead Chemical Engineer**





ТОВ «СП ЮКОЙЛ». Завод технічних олів.  
Україна, 09100, Київська обл., Білоцерківський р-н, місто Біла Церква, вул.Пулюя Івана, будинок 48-А  
Телефон приймальні: +38 (0612) 65 46 81  
Телефон ВТК: +38 (061) 222 80 25  
ЄДРПОУ 31852954



Випробувальна лабораторія ТОВ «СП ЮКОЙЛ» атестована на проведення вимірювань показників якості нафтопродуктів, технічних рідин та мастильних матеріалів. Свідчення про визнання технічної компетентності № АВ 43-22 від 22.11.2022р. видане ДП «ЗАПОРІЖСЬКА СТАНДАРТИМЕТРОЛОГІЯ», чинне до 16.11.2024 р

## Паспорт якості фасованої продукції №13086.05.01.1

### Мастило YUKO Літол-24

ТУ У 20.5-31852954-122:2023

Виробник: ТОВ «СП ЮКОЙЛ»  
Розфасовано: ТОВ «СП ЮКОЙЛ» за ТУ У 23.2-31852954-027:2006  
Клас NLGI **NLGI 3**  
Клас експлуатаційних властивостей: **K3K-40, ISO-L-XDCEA3**

Дата виготовлення: Березень 2024р.  
Тара: відро 20л жерсть  
Номер партії: 13086.29.03.24.02.

Ф.5 СТП014

Назва показника	Вимоги НД	Фактично	Метод випробувань
Зовнішній вигляд	Однорідна мазь гладкої структури від світло-жовтого до темно-коричневого кольору	Однорідна мазь гладкої структури жовтого кольору	ГСТУ 38.001 або п. 7.3 цих ТУ
Температура крапання, °С, не нижче	140	148	ГОСТ 6793 або ASTM D2265
Пенетрація при 25°С з перемішуванням, 0,1 мм	230-290	240	ГОСТ 5346, метод Б або ASTM D217
В'язкість ефективна при мінус 20°С та середньому градієнті швидкості деформації 10 с-1, Па·с, не більше	1 500	680	ГОСТ 7163 або ASTM D1092
Колоїдна стабільність: масова частка оливи, відпресованої від мастила, %, не більше	15,0	5,60	ГОСТ 7142
Межа міцності на зсув при 50°С, Па, не менше	150	266	ГОСТ 7143 метод Б
Випарність, %, не більше	5,0	0,48	ГОСТ 9566 з доп. за п. 7.4 цих ТУ
Корозійний вплив на пластини зі сталі	Витримує	Витримує	ГОСТ 9.080
Трибологічні характеристики на чотирикульковій машині при температурі (20 ± 5) °С:			ГОСТ 9490 або ASTM D2596
- навантаження зварювання (Рзв), Н, не менше	1 381	1 381	

Паспорт якості дійсний тільки за наявності печатки.

Висновок: якість продукції відповідає вимогам ТУ У 20.5-31852954-122:2023 і ТУ У 23.2-31852954-027:2006

Гарантійний термін зберігання - 5 років  
М. П.

Начальник ВТК

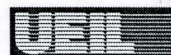


Анна ЛАРЧЕНКО

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Member of:



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Україна, 09100, Київська обл., Білоцерківський р-н, місто Біла Церква, вул.Пуплюя Івана, будинок 48-А  
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Телефон ВТК: +38 (061) 222 80 25  
ЄДРПОУ 31852954



Випробувальна лабораторія ТОВ «СП ЮКОЙЛ» атестована на проведення вимірювань показників якості нафтопродуктів, технічних рідин та мастильних матеріалів. Свідцтво про визнання технічної компетентності № АВ 43-22 від 22.11.2022р. видане ДП «ЗАПОРІЖЖЯСТАНДАРТИМЕТРОЛОГІЯ», чинне до 16.11.2024 р

**Паспорт якості фасованої продукції №20006.01.01.1**  
**Олива трансмісійна YUKO Нігрол – Л (GL-1, SAE 140)**  
ТУ У 19.2-31852954-010:2021

Виробник: ТОВ «СП ЮКОЙЛ».  
Розфасовано: ТОВ «СП ЮКОЙЛ» за ТУ У 23.2-31852954-027:2006  
Клас в'язкості: **SAE 140**  
Клас експлуатаційних властивостей: **API GL-1**

Дата виготовлення: Травень 2024р.  
Тара: каністра 5л ПЕ  
Номер партії: 20006.13.05.24.01.

Ф.5 СТП014

Назва показника	Вимоги НД	Фактично	Метод випробувань
Густина при 20°C, кг/м³, не більше	970	919,0	ГОСТ 3900 або ASTM D1298
В'язкість кінематична при 100°C, мм²/с	27 - 34	29,3	ДСТУ ГОСТ 33 або ASTM D445
Температура спалаху у відкритому тиглі, °C, не нижче	150	170	ДСТУ ГОСТ 4333 або ASTM D92
Температура застигання, °C, не вище	- 5	- 5	ГОСТ 20287 або ASTM D97
Вміст забруднювачів	Відсутність	Відсутність	ДСТУ ГОСТ 26378.2
Масова частка води, %, не більше	0,15	0,15	ГОСТ 2477 або ASTM D95
Масова частка водорозчинних кислот та луг, %	Відсутність	Відсутність	ГОСТ 6307
Випробування на корозію пластинок із сталі та міді	Витримує	Витримує	ГОСТ 2917 або ASTM D130

Паспорт якості дійсний тільки за наявності печатки.

Висновок: якість продукції відповідає вимогам ТУ У 19.2-31852954-010:2021 і ТУ У 23.2-31852954-027:2006

Гарантійний термін зберігання - 5 років  
М. П.

Начальник ВТК

Анна ЛАРЧЕНКО





**Safety Data Sheet**  
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## 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product identifier	
Mixture name	Brake fluid DOT - 4
Trade name	Brake fluid DOT - 4
Identified uses	Brake fluid for all kind of trucks and passenger cars.
Uses advised against	Any other use.
Manufacturer	Cherkasy Autochemistry Plant LLC 18003, Ukraine, Cherkasy Vyacheslava Chornovola, 118, PO Box 729 tel/fax: +38 (0472) 64-61-60 e-mail: <a href="mailto:site@vamp.ua">site@vamp.ua</a> website: <a href="http://www.vamp.ua">www.vamp.ua</a>
1.4 Emergency telephone number	
112 (Please note that emergency numbers may vary depending upon the country of delivery though 112 remains valid as universal number)	

## 2. HAZARDS IDENTIFICATION


2.1 Classification of the mixture	
Classification according to Regulation (EC) No 1272/2008 (CLP)	Additional information
Acute toxicity, Category 4, oral; Specific Target Organ Toxicity (repeated exp.), Category 2; Affected organs: kidney Route of exposure: Oral	H302: Harmful if swallowed. H373: May cause damage to organs through prolonged or repeated exposure Full text of P- H- phrases see section 16
Human Health effects	
Inhalation	Slight irritation in the upper respiratory tract or bothersome effect;
Eyes	Slight irritation.
Skin	Slight irritation.
Swallowing	Dose-dependent absorptive effects. Nausea, stomachache, lethargy, drowsiness.
2.2 Label elements	





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Product identifier	1,2-Ethanediol (Index # 603-027-00-1); 2,2'-oxydiethanol (Index # 603-140-00-6).
Hazard pictograms	
Signal word	Warning
Hazard statements	H302: Harmful if swallowed. H373: May cause damage to organs through prolonged or repeated exposure
Precautionary statements	P260: Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash with plenty of water and soap thoroughly after handling. P270 Do not eat, drink or smoke when using this product P301+P312+P330: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. rinse mouth. P314: Get medical advice/attention if you feel unwell. P501 Dispose of contents/ container in accordance with local regulations
Additional information	None
<b>2.3 Other hazards</b>	
The substances in mixture do not meet the criteria for PBT or vPvB according to Annex XIII of Regulation (EC) No.1907/2006 (REACH). Most of substances in mixture are combustible, difficult to ignite.	

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures (Hazardous ingredients and/or with relevant occupational exposure limits)						
Chemical name	EC #	CAS #	Concentration, range %	Classification	Index #	Reach reg #
2,2'-oxydiethanol	203-872-2	111-46-6	≤90	Acute Toxicity, Cat. 4, Ingestion; H302	603-140-00-6-	01-2119457857-21



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				STOT – rep. exp. Cat. 2; H373		
1,2-Ethanediol	203-473-3	107-21-1	>10	Acute Toxicity, Cat. 4, Ingestion; H302 Stot.rep., Cat. 2; H373	603-027-00-1	01-2119456816-28
2-aminoethanol	205-483-3	141-43-5	0,02	Acute Tox. 4 H302, H312, H332 Skin corrosion Cat. 1B; H314 Serious Eye Damage Cat 1; H318 Hazardous to the Aquatic Env. Chronic Cat. 3; H412 STOT SE 3; H335: C ≥ 5 %	603-030-00-8	-

The mixture does not contain other additives in quantities that could affect product's labelling and classification according to CLP.

#### 4. FIRST AID MEASURES

##### 4.1 Description of first aid measures

<b>In case of inhalation:</b>	Inhalation of product is not expected. Keep patient calm, remove to fresh air, seek medical attention.
<b>In case of eye contact:</b>	Wash affected eyes for at least 15 minutes under running water with eyelids held open. Consult ophthalmologist if irritation persists.
<b>In case of skin contact:</b>	Wash affected area thoroughly with soap and water.
<b>In case of ingestion:</b>	Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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

<b>In case of inhalation</b>	Headache, dizziness, weakness. Due to the low vapor pressure under normal conditions, exposure to vapors is only toxicologically relevant when handling heated mixture.
<b>In case of eye contact</b>	slightly irritating effect on mucous membranes.



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<b>In case of skin contact</b>	Slight irritation, redness, edema.
<b>In case of ingestion</b>	Headache, dizziness, weakness, vomiting, nausea, diarrhea, in case of severe poisoning: fainting, convulsions, damage to the kidneys.
<b>Information to physician and first aider.</b>	The risk of life-threatening poisoning should generally only exist after ingestion or very massive inhalation of aerosols. Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote
<b>First aid arsenal</b>	Universal medical kit with a set of drugs (in consultation with the medical department of the enterprise).
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	
Immediate medical attention is not usually expected.	

## 5. FIREFIGHTING MEASURES

<b>5.1 Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water spray, dry powder, alcohol-resistant foam, carbon dioxide
<b>Unsuitable extinguishing media</b>	Do not use direct water jets as water destroys the foam.
<b>5.2 Special hazards arising from the substance or mixture</b>	
<b>Hazardous combustion products</b>	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates and gases, including carbon monoxide and carbon dioxide and minor amounts of nitrous oxides.
<b>5.3 Advice for firefighters</b>	
Combustible product, ignites from open flame. Cool containers with water from distance. Wear full fire-resistant protective clothing and self-contained breathing apparatus with a full face-piece operated in positive pressure mode for confined or poorly ventilated spaces	
<b>Further information:</b> The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.	

## 6. ACCIDENTAL RELEASE MEASURES.

<b>6.1. Personal precautions, protective equipment and emergency procedures</b>	
<b>6.1.1. For non-emergency personnel</b>	Avoid contact with skin and eyes. Use personal protective clothing. Stop or contain leak at the source if safe to do so. Avoid direct contact with released



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	material. Stay upwind. Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares).
<b>6.1.2. For emergency responders</b>	Body suit of chemically resistant and antistatic material. Work gloves providing adequate chemical resistance. Work helmet. Antistatic non-skid safety shoes or boots. Goggles if contact with eyes is possible. A half or full-face respirator with combined dust/organic vapor filter(s), or a Self-Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and fire presence. If release is accompanied with fire – see Section 5.3
<b>6.2 Environmental precautions</b>	
Do not empty into drains. Do not discharge into the subsoil/soil. Prevent product from entering soil, sewers, rivers, waterways or other bodies of water. Spills should be shielded with an earthen rampart.	
<b>6.3 Methods and material for containment and cleaning up</b>	
For large amounts: Pump off product. Dike the product and other contaminated materials to suitable corrosion resistant containers for recycle, recovery or safe disposal. The product can be absorbed with non-combustible materials e.g. sand and then collected. Flush the spill area with water. In case soil contamination in big quantities report to local authorities. For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).	
<b>6.4 Reference to other section</b>	
Information about personal precautions - see Section 8. Information about waste disposal - see Section 13.	

## 7. HANDLING AND STORAGE

<b>7.1 Precautions for safe handling</b>	
<b>General precautions for safe handling</b>	Use in well ventilated areas. Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing fumes or vapors.
<b>Fire preventions</b>	No smoking at working area. Take precautionary measures against static discharges.



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	Take precautionary measures against static electricity such as ensuring all equipment is electrically grounded. Electrical devices must meet the specified temperature class. Temperature class: T2 (Auto ignition temperature >300 °C).
<b>Aerosol and dust generation preventions</b>	Avoid spraying and mist formation if used with equipment under pressure.
<b>Advice on general occupational hygiene</b>	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face and remove contaminated clothing and protective equipment before entering eating areas.
<b>Environmental precautions</b>	Do not allow product to enter into surface water or drains.
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	
<b>Technical measures and storage conditions</b>	Store indoors in a cool, dry, well-ventilated area, away from incompatible materials and heat at ambient temperature. Storage temperature: < 40 °C The stated storage temperature should be noted.
<b>Packaging</b>	aluminum, Stainless steel, High density polyethylene (HDPE), light-impervious
<b>Incompatible materials</b>	Oxidizing agents, strong bases and acids.
<b>Requirements for storage rooms and vessels</b>	Provide general ventilation. Protect from atmospheric humidity. Protect contents from the effects of light.
<b>Need for use of stabilizers or antioxidants</b>	No
<b>7.3 Specific end use(s)</b>	
None.	

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters					
Occupational exposure limits					
Limit value type (country of origin)	Substance name	CAS-No.	Monitoring procedures	Occupational exposure limit value	
				Long term mg/m <sup>3</sup>	Short term mg/m <sup>3</sup>



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EU (OEL)	2-aminoethanol	141-43-5	Area Air Sampling	2,5	7,6
EU ( OEL)	1,2-Ethanediol	107-21-1	-	LTEL TWA =52	STEL =104
Germany ( DFG)	2,2'-oxydiethanol	111-46-6	-	LTEL TWA=44	STEL =176
DNEL/DNEL values:					
Substance name	Worker	Consumer	Exposure route	Exposure frequency	Remark
2-aminoethanol	DNEL = 1 mg/m³	DNEL = 0.18 mg/m³	inhalation	Long term	-
	DNEL = 3 mg/kg bw/day	DNEL = 1.5 mg/kg bw/day	dermal	Long term	-
	-	DNEL = 1.5 mg/kg bw/day	oral	Long term	-
1,2-Ethanediol	DNEL=35 mg/m³	7 mg/m³	inhalation	Long-term	-
	106 mg/kg bw/day	53 mg/kg bw/day	dermal	Long-term	-
	No hazard identified	No hazard identified	Eye	-	local effects
2,2'-oxydiethanol	43 mg/kg bw/day	21 mg/kg bw/day	dermal	Long term	Systemic effect
	44 mg/m³	12 mg/m³	inhalation	Long-term	systemic effects
	60 mg/m³	12 mg/m³	inhalation	Long-term	local effects
PNEC values:					
Substance name	Environmental compartment	Value		Assessment factor	Remark
2-aminoethanol	aqua (freshwater)	PNEC = 0.07 mg/L		10	-
	aqua (marine water)	PNEC = 0.007 mg/L		100	-
	sediment (freshwater)	PNEC = 0.357 mg/kg sediment dw		-	-
	sediment (marine water)	PNEC = 0.036 mg/kg sediment dw		-	-
1,2-Ethanediol	aqua (freshwater)	PNEC 10 mg/L		-	



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	PNEC aqua (marine water)	PNEC 1 mg/L	-
	PNEC aqua (intermittent, freshwater)	PNEC 10 mg/L	-
2,2'-oxydiethanol	freshwater	PNEC 10 mg/L	-
	aqua (marine water)	PNEC 1 mg/L	-
	Sediment (freshwater) dw	PNEC = 20.9 mg/kg	-

## 8.2 Exposure controls

### Occupational exposure controls

#### 8.2.1. Appropriate engineering controls

Appropriate general ventilation should be sufficient.

#### 8.2.2. Individual protection measures, such as personal protective equipment

<b>Respiratory protection</b>	Not needed during foreseen use. If fumes or mists are formed due to accident use respirator. Wear respiratory protection if ventilation is inadequate. Gas filter for gases/vapors of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)
<b>Eye/face protection</b>	If potential exists for splashing or mist formation, use tightly fitting safety goggles (e.g. EN 166)
<b>Skin/body protection</b>	Wear working protective gloves (EN 374). Wear regular work clothing.

#### 8.2.3. Environmental exposure controls

<b>Measures to prevent exposure</b>	Emissions from wastewaters from work processes should be checked to ensure they comply with the requirements of environmental protection legislation.
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## 9. PHYSICAL AND CHEMICAL PROPERTIES.

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	Oily liquid
<b>Colour</b>	Light yellow
<b>Odour</b>	Almost odorless



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<b>Melting point/freezing point (°C)</b>	- 35
<b>Initial boiling point/range (°C)</b>	230 244 (2,2'-oxydiethanol) , 197°C ( 1,2-ethandiol)
<b>Flammability</b>	nonflammable (GHS classification criteria for flammable liquids: no category (nonflammable) Flash point >93 °C)
<b>Lower and upper explosion limit</b>	Non explosive <u>2,2'-oxydiethanol</u> : Lower explosion limit: 1.7% by volume 75 g/m <sup>3</sup> Upper explosion limit: 37% by volume 1635 g/m <sup>3</sup> <u>1,2- ethandiol</u> : Lower explosion limit: 3.2% by volume 80 g/m <sup>3</sup> Upper explosion limit: 43 - 51% (by vol. 1090 ... 1326 g/m <sup>3</sup> Lower explosion point: 109°C
<b>Flash point (°C)</b>	120°C 138 °C (2,2-oxydiethanol) 111°C (1,2- ethandiol) 91°C – closed cup (2-aminoethanol)
<b>Auto-ignition temperature (°C)</b>	No data available for mixture 372 °C (2,2-oxydiethanol) 410°C (1,2-(Ethandiol) 424 (2-aminoethanol)
<b>Decomposition temperature (°C)</b>	No data available for mixture.
<b>pH</b>	pH value 7,0 -11,5
<b>Kinematic viscosity (cSt = mm<sup>2</sup>/c) at minus (30±1) °C</b>	< 1800
<b>Solubility</b>	Miscible with water.
<b>Partition coefficient n-Octanol/Water (log Po/w)</b>	Does not apply to mixtures.
<b>Vapour pressure (kPa)</b>	No data available for mixture. 0.008hPa(2,2-oxydiethanol) 0.123 hPa at 25 °C(1,2- ethandiol)
<b>Density and/or relative density</b>	1,06
<b>Relative vapour density</b>	No data available for mixture
<b>Particle characteristics</b>	Not applicable
<b>9.2 Other information</b>	
<b>9.2.1. Information with regard to physical hazard classes</b>	None





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9.2.2. Other safety characteristics	None
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## 10. STABILITY AND REACTIVITY

10.1 Reactivity	The substance can react dangerously with strong oxidizing agents
10.2 Chemical stability	The product is stable upon appropriate handling and storage conditions.
10.3 Possibility of hazardous reactions	oxidation in flame or excessive heat. Risk of explosion in contact with: perchloric acid
10.4 Conditions to avoid	Avoid heat, open flames, incompatible materials.
10.5 Incompatible materials	Oxidizing agents, bases and acids.
10.6 Hazardous decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates and gases, including carbon monoxide and carbon dioxide and minor amounts of nitrous oxides.

## 11. TOXICOLOGICAL INFORMATION

<b>11.1 Information on toxicological effects.</b>					
<b>Toxicokinetics, metabolism and distribution</b>					
The main intake route for mixture at the workplace is via the respiratory tract. Due to the very low vapor pressure of the liquid under normal conditions, exposure to vapors is to be expected mainly on heating. The kidneys are considered to be a critical target organ of mixture components, even after repeated exposure. Cases of poisoning in humans show that easily acutely toxic doses can be absorbed in this way.					
<b>Acute toxicity</b>			The mixture is classified as Acute toxicity, Category 4, oral; respectively classified substances are present in it. Data on substances is presented below.		
<b>Substance name</b>	<b>Exposure route</b>	<b>Value</b>	<b>Exposure time period</b>	<b>Species</b>	<b>Method (as is, equivalent or similar)</b>
2,2-oxydiethanol	oral	LD50 = 19600 mg/kg bw	-	rat	-
	dermal	LD50 = 13300 mg/kg bw	-	Rabbits	-
1,2-ethandiol	oral	LD50 = 4700mg/kg	-	rat	-



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	dermal	LD50 = 10600 mg/kg	-	Rabbits	-
2-aminoethanol	oral	LD50 = 1089 mg/kg	single dose	rat	OECD Guideline 401
	inhalation	LC50 = 1300 mg/m <sup>3</sup>	6 hours	rat	national standard method with acceptable restrictions
	dermal	LD50 = 2504 mg/kg	24 hours	rabbit	OECD Guideline 402
Skin corrosion/irritation		The mixture is not classified as skin corrosive or irritating. Data on substances presented below.			
Substance name	Relevance	Result	Species	Method (as is, equivalent or similar)	
2,2-oxydiethanol	No	After a single dermal application of 50 mg DEG/kg body weight to the skin about 10% of the dose was absorbed within 72 hours. In the case of impact on injured skin, higher exposures must be expected.	rats	-	
2-aminoethanol	Yes	Erythema score 3 not reversible Classified as Skin corr. 1B	rabbit	OECD Guideline 404	
Serious eye damage/irritation	The mixture is not classified as Serious eye damage/irritation as it contains the lowest concentration of the classified substance. Data on substance presented below				
Substance name	Relevance	Result	Species	Method (as is, equivalent or similar)	
2-aminoethanol	Yes	Irreversible effects on the eye Classified as Eye. Dam. 1.	Rabbit	OECD Guideline 405	
Respiratory or skin sensitization	The mixture is not classified as sensitizing as no respectively classified substances are present in it.				
Germ cell mutagenicity	The mixture is not classified as no respectively classified substances are present in it.				
Carcinogenicity	The mixture is not classified as carcinogen as no respectively classified substances are present in it. 2,2'-oxydiethanol NOAEL (carcinog.), oral, rat=1160 mg/kg bw/day				
Reproductive toxicity	The mixture is not classified as possessing reproductive toxicity as no respectively classified substances are present in it.				



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	Data on substances presented below.			
Substance name	Relevance	Result	Species	Method (as is, equivalent or similar)
2-aminoethanol	Yes	NOAEL = 1 000 mg/kg bw/day	rat	OECD Guideline 415
2,2'-oxydiethanol		NOAEL (effects on fertility), subacute, 3060mg/kg bw/day	oral, mouse	-
specific target organ toxicity — single exposure	The mixture is not classified for specific target organ toxicity — single exposure as no respectively classified substances are present in it.			
STOT-repeated exposure	The mixture is classified as STOT-repeated exposure, Category 2, oral (Affected organs: kidney Route of exposure: Oral;) respectively classified substances are present in it. Data on substances is presented below.			
Substance name	Exposure route	Result	Species	Method (as is, equivalent or similar)
2,2-oxydiethanol	oral	NOAEL = 300 mg/kg bw/day(98 days)	rats	System: urinary. Organ: kidney
2-aminoethanol	oral	NOAEL = 300 mg/kg bw/day 75 days	rat	
1,2-ethandiol	oral	NOAEL =150 mg/kg bw/day The kidneys were found to be the target organ at higher doses	rat	equivalent or similar to OECD Guideline 452
Aspiration hazard	The mixture is not classified for aspiration toxicity as no respectively classified substances are present in it.			
Adverse health effects and symptoms associated with exposure				
In case of inhalation		due to high concentrations of vapors/aerosol, slight irritation in the upper respiratory tract or bothersome effect; in extreme cases breathing difficulties and absorptive effects		
In case of eye contact		no or little irritation		
In case of skin contact		no significant irritation; systemic effects must be expected if there is extensive contact with damaged skin.		
In case of ingestion		hardly any irritation, dose-dependent absorptive effects.		



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#### 11.2 Information on other hazards

<b>Endocrine disrupting properties</b>	Any of the ingredient of mixture has not been identified as having endocrine disrupting properties.
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### 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity:

Due to all available data on environmental fate and aquatic toxicology the substance does not need to be classified according to EU GHS CLP. Data on substances presented below.

Chemical name	Aquatic toxicity	Effect dose	Exposure time	Species	Method
diethylene glycol	Short-term toxicity to fish	LC50=75200 mg/L	96h	Fathead minnow (Pimephales promelas)	a flow-through study
	Long-term toxicity to fish	(ChV)7694 mg/L	30d	fish	QSAR EpiWin-Program ECOSAR v1.11
ethyleneglycol	Short-term toxicity to fish	LC50>72860 mg/L	96 h	Pimephales promelas	EPA 600/4-90/027
	Short-term toxicity to fish	LC50 =41000 mg/l	48 h	Crustaceans	-
2-aminoethanol	Acute toxicity to fish	LC50 = 280 mg/L	96 hours	Cyprinus carpio	Directive 92/69/EEC, C.1.
	Long-term toxicity to fish	NOEC = 1.24 mg/L	41 days	Oryzias latipes	OECD Guideline 210
	Acute toxicity to aquatic invertebrates	EC50 = 27.04 mg/L	48 hours	Daphnia magna	OECD Guideline 202
	Long-term toxicity to aquatic invertebrates	NOEC = 0.85 mg/L	21 day	Daphnia magna	OECD Guideline 202
	Toxicity to aquatic algae and cyanobacteria	NOEC = 1 mg/L	72 hours	Pseudokirchneriella subcapitata	OECD Guideline 201
	Toxicity to microorganisms	EC10 > 1 000 mg/L	30 min.	activated sludge	OECD Guideline 209

#### 12.2 Persistence and degradability

##### Abiotic Degradation

No data available for mixture.

##### Biodegradation

Readily biodegradable (according to OECD criteria).



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**According to the Regulation (EC) №1907/2006**  
**Brake fluid**  
**DOT -4**

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1,2-ethandiol: After 10 days > 90 % degradation was determined. (OECD 301A)  
2,2-oxydiethanol: meet the criteria in a carbon dioxide evolution test according to OECD 301B.  
% Degradation of test substance: 90 – 100% after 28d

**12.3 Bioaccumulative potential**

No data available for mixture .

**12.4 Mobility in soil**

Study scientifically unjustified (substance is readily biodegradable)

**12.5 Results of PBT and vPvB assessment**

The substances in mixture do not meet the criteria for PBT or vPvB.

**12.6 Other adverse effects:**

None

**13. DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

<b>Appropriate disposal / Product</b>	Waste disposal should be in strict correspondence with local and national laws and regulations. Waste of the product is not regarded as hazardous according to Directive 2008/98/EC.
<b>Waste codes according to EWC</b>	none
<b>Appropriate disposal /Packaging</b>	Contaminated stainless steel empty containers should be properly cleaned and reused. Contaminated PE containers should be disposed as product or municipal waste.

**14. TRANSPORT INFORMATION**

<b>The product is transported by railway (RID) and road (ADR) and waterways (ADN)</b> <b>Not subject to transport regulations.</b>	
<b>14.1 UN number</b>	None
<b>14.2 UN proper shipping name</b>	None
<b>14.3 Transport hazard class(es)</b>	None
<b>14.4. Packing group</b>	None
<b>14.5. Environmental hazards</b>	Not considered as marine pollutant according to IMDG Code.
<b>14.6. Special precautions for user</b>	None
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	This product is not transported in bulk and is out of the scope of Annex II of MARPOL 73/78.

**15. REGULATORY INFORMATION**



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**Brake fluid**  
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**15.1 Safety, health and environmental regulations/legislation specific for the substance**

None

**15.2 Chemical Safety Assessment**

Chemical safety assessment has not been carried for the mixture.

**16. OTHER INFORMATION**

**Revision**

SDS has been issued for the first time.

**Abbreviations**

OEL – occupational exposure limit  
VLEP – valeurs limites d'exposition professionnelle- occupational exposure limit values  
VLE - valeurs limites d'exposition- occupational exposure limit values  
MAK - maximum workplace concentrations  
MAC - maximum workplace concentrations  
WEL- Workplace Exposure Limits  
AK - Permissible average concentration  
DNEL - derived no-effect level  
PNEC - predicted no effect concentration  
LD50 – lethal dose  
EC50 – half maximal effective concentration  
EC10 - half maximal effective concentration  
NOEL - no observed effect level  
NOEC - no observed effect concentration  
NOAEL – no observed adverse effect level  
PBT or vPvB - persistent, bioaccumulative and toxic or very persistent very bioaccumulative  
STOT SE – Specific target organ toxicity – single exposure  
STOT RE - Specific target organ toxicity – repeated exposure  
AF – Assessment factor

**Sources for data**

Suppliers' SDS for 1,2-ethandiol  
Suppliers' SDS for 2,2'-oxydiethanol  
ECHA database on registered substances  
GESTIS database on international limit values  
Specification TU U 20.5-37439067-006:2019

**Classification method**

For the purpose of classification of mixture available data on all substances and additivity principle was used. For the purpose of not classification of mixture for flammable liquids class results of flash point tests for mixture components was used.

**List of hazard statements and/or precautionary statements**

H302: Harmful if swallowed.



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H373: May cause damage to organs through prolonged or repeated exposure  
P260: Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 Wash with plenty of water and soap thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product  
P301+P312+P330: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. rinse mouth.  
P314: Get medical advice/attention if you feel unwell.  
P501 Dispose of contents/ container in accordance with local regulations  
All H- P-statements are mentioned in full in Section 2 of the SDS.

**Advice on training**

Read carefully the SDS before using the product.

Train personnel in the safe use of this product.

The information contained in this SDS is based on current knowledge and experience and describes the product only with regard to the safety of the product. The product must not be used for purposes other than those specified in section 1. The consumer is solely responsible for compliance with all applicable local laws and regulations. This information is not a guarantee of product quality. This information may be subject to revision as new knowledge and experience becomes available. Present SDS must be replaced with a new one if any changes will be made in the composition of the product.



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## ПАСПОРТ КАЧЕСТВА № 23-4260/p

**Жидкость охлаждающая  
низкотемпературная марки ТА красный  
Антифриз G12+**

Партия №: 23-561-01  
Масса нетто, кг указано на канистре

Дата фасовки  
Вид и тип тары

14.09.2023  
кан п/е 1л 5л 10 л

№	Название показателя	Норма	Факт	Метод испытания
1	Внешний вид	Однородная прозрачная жидкость без механических примесей. Цвет соответствует образцу-эталону	Соответствует	ТУ У 24.6-14215951-001:2010 п.6,3
2	Плотность при температуре 20 °С, г/см³, не меньше	1.055	1,058	ДСТУ 7261:2012
3	Температура начала кристаллизации, °С, не выше	-23	-23	ТУ У 24.6-14215951-001:2010 п.6,5
4	Фракционный состав:			ТУ У 24.6-14215951-001:2010 п.6,6
	Температура начала перегонки, °С, не ниже	100	101,0	
	Фракционный состав массовая доля жидкости, перегоняемая до температуры °С, не больше	60	57,5	
5	Коррозионное воздействие на металлы г/м² сут., не больше *			ТУ У 24.6-14215951-001:2010 п.6,7
	<input type="checkbox"/> алюминий	0.1	0,10	
	<input type="checkbox"/> чугун	0.1	0,08	
	<input type="checkbox"/> сталь	0.1	-0,05	
	<input type="checkbox"/> медь	0.1	0,02	
	<input type="checkbox"/> латунь	0.1	-0,01	
	<input type="checkbox"/> припой	0.2	0,01	
6	Вспениваемость:			ТУ У 24.6-14215951-001:2010 п.6,8
	<input type="checkbox"/> Объем пены, см³ не больше	30	0	
	<input type="checkbox"/> Стойкость пены, с, не больше	3	0	
7	Набухание резины, %, не больше	5	2,0	ТУ У 24.6-14215951-001:2010 п.6,9
8	Водородный показатель(pH), при 20 °С	7.5-11.0	8,5	ТУ У 24.6-14215951-001:2010 п.6,10
9	Щелочность, см³ раствора КОН, не меньше	10	10	ТУ У 24.6-14215951-001:2010 п.6,11
10	Температура застывания, °С, не выше	-25	-25	ТУ У 24.6-14215951-001:2010, п.6.13

Гарантийный срок хранения – 5 лет

Ответственный за анализ

Контроль качества упаковки

Печать



Подпись

Подпись





# ALTAIR

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ул. В.Чорновола 118, тел. +38 (0472) 64-24-04, 64-04-90

## ПАСПОРТ КАЧЕСТВА № 24-1389/1

**Жидкость охлаждающая  
низкотемпературная марки ТА**

Партия №: 24-155-01  
Масса нетто, кг указано на канистре

Дата фасовки  
Вид и тип тары

16.04.2024  
кан п/э 5л, 10л

№	Название показателя	Норма	Факт	Метод испытания
1	Внешний вид	Однородная прозрачная жидкость без механических примесей. Цвет соответствует образцу - эталону	Соответствует	ТУ У 24.6-14215951-001:2010 п.6,3
2	Плотность при температуре 20 °С, г/см³, не меньше	1.055	1,061	ДСТУ 7261:2012
3	Температура начала кристаллизации, °С, не выше	-23	-23	ТУ У 24.6-14215951-001:2010 п.6,5
4	Фракционный состав:			ТУ У 24.6-14215951-001:2010 п.6,6
	Температура начала перегонки, °С, не ниже	100	103,0	
	Фракционный состав массовая доля жидкости, перегоняемая до температуры °С, не больше	60	70,0	
5	Коррозионное воздействие на металлы г/м2 сут., не больше *			ТУ У 24.6-14215951-001:2010 п.6,7
	<input type="checkbox"/> алюминий	0.1	0,09	
	<input type="checkbox"/> чугун	0.1	0,09	
	<input type="checkbox"/> сталь	0.1	0,05	
	<input type="checkbox"/> медь	0.1	0,07	
	<input type="checkbox"/> латунь	0.1	0,05	
	<input type="checkbox"/> припой	0.2	0,16	
6	Вспениваемость:			ТУ У 24.6-14215951-001:2010 п.6,8
	<input type="checkbox"/> Объем пены, см3 не больше	30	0	
	<input type="checkbox"/> Стойкость пены, с, не больше	3	0	
7	Набухание резины, %, не больше	5	1,9	ТУ У 24.6-14215951-001:2010 п.6,9
8	Водородный показатель(рН), при 20 °С	7.5-11.0	8,8	ТУ У 24.6-14215951-001:2010 п.6,10
9	Щелочность, см3 раствора КОН, не меньше	не нормується	11,4	ТУ У 24.6-14215951-001:2010 п.6,11
10	Температура застывания, °С, не выше	-25	-25	ТУ У 24.6-14215951-001:2010, п.6.13

Гарантийный срок хранения – 5 лет

Вывод: соответствует требованиям договора № 1 от 01.07.2010

Ответственный за анализ

Подпись

Контроль качества упаковки

Подпись



Печать

