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ПАСПОРТ КАЧЕСТВА № 16-1834/2

**Жидкость охлаждающая
низкозамерзающая марки А-38 красный
Антифриз Сt12+
ТУ У 24.6-14215951-001:2010 зі змінами 1-6**

Партия №: 23-769-01
Масса нетто, кг указано на канистре

Дата фасовки
Вид и тип тары

08.12.2023
кан. п/е 10л,5л

№	Название показателя	Норма	Факт	Метод испытания
1	Внешний вид	Однородная прозрачная жидкость без механических примесей. Цвет соответствует образцу-эталоны	Соответствует	ГОСТ 28084-89, п.4.1
2	Плотность при температуре 20 °С, г/см ³ , не меньше	1,06	1,073	ГОСТ 18995.1-73, раздел 1
3	Температура начала кристаллизации, °С, не выше	-36	-36,0	ГОСТ 28084-89, п.4.3
4	Фракционный состав:			ГОСТ 28084-89, п.4.4
	Точка кипения, °С, не ниже	108	108,0	
	Фракционный состав массовая доля жидкости, перегоняемая до температуры °С, не больше	60	52,0	
5	Коррозионное воздействие на металлы г/м2 сут., не больше			ГОСТ 28084-89, п.4.5
	☐ алюминий	0,1	0,08	
	☐ чугун	0,1	0,07	
	☐ сталь	0,1	0,06	
	☐ медь	0,1	0,05	
	☐ латунь	0,1	0,06	
	☐ припой	0,2	0,12	
6	Вспениваемость:			ГОСТ 28084-89, п.4.6
	☐ Объем пены, см3 не больше	30	0,00	
	☐ Стойкость пены, с, не больше	3	0,00	
7	Содержание золы, %, не более	2,5	0,00	ГОСТ 28084-89
8	Набухание резины, %, не больше	5	0,9	ГОСТ 28084-89, п.4.7
9	Водородный показатель (pH), при 20 °С	7,5-11,0	8,6	ГОСТ 28084-89, п.4.8
10	Щелочность, см3 раствора КОН, не меньше	не нормируется	20,0	ГОСТ 28084-89, п.4.9
11	Температура застывания, °С, не выше	-39	-40,0	ТУ У 24.6-14215951-001:2010, п.6.13

*Согласно протокола периодических испытаний № 23-68 от 02.11.2023

Гарантийный срок хранения – 5 лет

Выбор соответствует требованиям ТУ У 24.6-14215951-001:2010 зі змінами 1-6

Ответственный за анализ Суржикова Н. Л.

Подпись

Контроль качества упаковки Бабенкова Т.

Подпись

Печать



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ПАСПОРТ КАЧЕСТВА № 16-1835/1

**Жидкость охлаждающая
низкозамерзающая марки А-40**

Тосол А-40

ТУ У 24.6-14215951-001:2010 зі змінами 1-6

Партия №: 136-03
Масса нетто, кг указано на канистре

Дата фасовки
Вид и тип тары

06.10.2024
кан.п/е, 10л., 20л.

№	Название показателя	Норма	Факт	Метод испытания
1	Внешний вид	Однородная прозрачная жидкость без механических примесей. Цвет соответствует образцу-эталоны	Соответствует	ГОСТ 28084-89, п.4.1
2	Плотность при температуре 20 °С, г/см³, не меньше	1,06	1,074	ГОСТ 18995.1-73, розділ 1
3	Температура начала кристаллизации, °С, не выше	-36	-37	ГОСТ 28084-89, п.4.3
4	Фракционный состав:			ГОСТ 28084-89, п.4.4
	Температура начала перегонки, °С, не ниже	100	108,0	
	Фракционный состав массовая доля жидкости, перегоняемая до температуры °С, не больше	60	54,3	
5	Коррозионное воздействие на металлы г/м2 сут., не больше *			ГОСТ 28084-89, п.4.5
	☐ алюминий	0.1	0,04	
	☐ чугун	0.1	0,08	
	☐ сталь	0.1	0,03	
	☐ медь	0.1	0,04	
	☐ латунь	0.1	0,05	
	☐ припой	0.2	0,15	
6	Вспениваемость:			ГОСТ 28084-89, п.4.6
	☐ Объем пены, см3 не больше	30	0	
	☐ Стойкость пены, с, не больше	3	0	
7	Набухание резины, %, не больше	5	1,3	ГОСТ 28084-89, п.4.7
8	Водородный показатель(рН), при 20 °С	7.5-11.0	8,8	ГОСТ 28084-89, п.4.8
9	Щелочность, см3 раствора КОН, не меньше	не нормируется	17	ГОСТ 28084-89, п.4.9
10	Температура застывания, °С, не выше	-40	-40	ТУ У 24.6-14215951-001:2010, п.6.13

***Согласно протокола периодических испытаний № 16-006 от 01.03.2016**

Гарантийный срок хранения – 5 лет

Вывод: соответствует требованиям ТУ У 24.6-14215951-001:2010 зі змінами 1-6

Ответственный за анализ Суржикова Н. Л.

Подпись

Контроль качества упаковки

Подпись

Печать





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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 1 of 16
------------------	--------------	-----------------------	--------------

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: site@vamp.ua website: www.vamp.ua
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	



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 2 of 16
------------------	--------------	-----------------------	--------------

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
2.3 Other hazards	
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



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 3 of 16
------------------	--------------	-----------------------	--------------

				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

In case of inhalation:	Inhalation of product is not expected. Keep patient calm, remove to fresh air, seek medical attention.
In case of eye contact:	Wash affected eyes for at least 15 minutes under running water with eyelids held open. Consult ophthalmologist if irritation persists.
In case of skin contact:	Wash affected area thoroughly with soap and water.
In case of ingestion:	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

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



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 4 of 16
------------------	--------------	-----------------------	--------------

In case of skin contact	Slight irritation, redness, edema.
In case of ingestion	Headache, dizziness, weakness, vomiting, nausea, diarrhea, in case of severe poisoning: fainting, convulsions, damage to the kidneys.
Information to physician and first aider.	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
First aid arsenal	Universal medical kit with a set of drugs (in consultation with the medical department of the enterprise).
4.3 Indication of any immediate medical attention and special treatment needed	
Immediate medical attention is not usually expected.	

5. FIREFIGHTING MEASURES

5.1 Extinguishing media	
Suitable extinguishing media	Water spray, dry powder, alcohol-resistant foam, carbon dioxide
Unsuitable extinguishing media	Do not use direct water jets as water destroys the foam.
5.2 Special hazards arising from the substance or mixture	
Hazardous combustion 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.
5.3 Advice for firefighters	
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	
Further information: 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.

6.1. Personal precautions, protective equipment and emergency procedures	
6.1.1. For non-emergency personnel	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



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 5 of 16
------------------	--------------	-----------------------	--------------

	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).
6.1.2. For emergency responders	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
6.2 Environmental precautions	
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.	
6.3 Methods and material for containment and cleaning up	
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).	
6.4 Reference to other section	
Information about personal precautions - see Section 8. Information about waste disposal - see Section 13.	

7. HANDLING AND STORAGE

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



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 6 of 16
------------------	--------------	-----------------------	--------------

	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).
Aerosol and dust generation preventions	Avoid spraying and mist formation if used with equipment under pressure.
Advice on general occupational hygiene	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.
Environmental precautions	Do not allow product to enter into surface water or drains.
7.2 Conditions for safe storage, including any incompatibilities	
Technical measures and storage conditions	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.
Packaging	aluminum, Stainless steel, High density polyethylene (HDPE), light-impervious
Incompatible materials	Oxidizing agents, strong bases and acids.
Requirements for storage rooms and vessels	Provide general ventilation. Protect from atmospheric humidity. Protect contents from the effects of light.
Need for use of stabilizers or antioxidants	No
7.3 Specific end use(s)	
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/m³	Short term mg/m³



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 7 of 16
-------------------------	---------------------	------------------------------	---------------------

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/DMEL 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		-	



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 8 of 16
------------------	--------------	-----------------------	--------------

	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

Respiratory protection	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)
Eye/face protection	If potential exists for splashing or mist formation, use tightly fitting safety goggles (e.g. EN 166)
Skin/body protection	Wear working protective gloves (EN 374). Wear regular work clothing.

8.2.3. Environmental exposure controls

Measures to prevent exposure	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

Physical state	Oily liquid
Colour	Light yellow
Odour	Almost odorless



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 9 of 16
------------------	--------------	-----------------------	--------------

Melting point/freezing point (°C)	- 35
Initial boiling point/range (°C)	230 244 (2,2'-oxydiethanol) , 197°C (1,2-ethandiol)
Flammability	nonflammable (GHS classification criteria for flammable liquids: no category (nonflammable) Flash point >93 °C)
Lower and upper explosion limit	Non explosive <u>2,2'-oxydiethanol</u> : Lower explosion limit: 1.7% by volume 75 g/m ³ Upper explosion limit: 37% by volume 1635 g/m ³ <u>1,2- ethandiol</u> : Lower explosion limit: 3.2% by volume 80 g/m ³ Upper explosion limit: 43 - 51%(by vol. 1090 ... 1326 g/m ³ Lower explosion point: 109°C
Flash point (°C)	120°C 138 °C (2,2-oxydiethanol) 111°C (1,2- ethandiol) 91°C – closed cup (2-aminoethanol)
Auto-ignition temperature (°C)	No data available for mixture 372 °C (2,2-oxydiethanol) 410°C (1,2-(Ethandiol) 424 (2-aminoethanol)
Decomposition temperature (°C)	No data available for mixture.
pH	pH value 7,0 -11,5
Kinematic viscosity (cSt = mm²/c) at minus (30±1) °C	< 1800
Solubility	Miscible with water.
Partition coefficient n-Octanol/Water (log Po/w)	Does not apply to mixtures.
Vapour pressure (kPa)	No data available for mixture. 0.008hPa(2,2-oxydiethanol) 0.123 hPa at 25 °C(1,2- ethandiol)
Density and/or relative density	1,06
Relative vapour density	No data available for mixture
Particle characteristics	Not applicable
9.2 Other information	
9.2.1. Information with regard to physical hazard classes	None



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 10 of 16
------------------	--------------	-----------------------	---------------

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

11.1 Information on toxicological effects.					
Toxicokinetics, metabolism and distribution					
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.					
Acute toxicity			The mixture is classified as Acute toxicity, Category 4, oral; respectively classified substances are present in it. Data on substances is presented below.		
Substance name	Exposure route	Value	Exposure time period	Species	Method (as is, equivalent or similar)
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	-



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 11 of 16
------------------	--------------	-----------------------	---------------

	dermal	LD50 = 10600 mg/kg	-	Rabbits	-
2-aminoethanol	oral	LD50 = 1089 mg/kg	single dose	rat	OECD Guideline 401
	inhalation	LC50 = 1300 mg/m ³	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.				



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 12 of 16
------------------	--------------	-----------------------	---------------

	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.		



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 13 of 16
------------------	--------------	-----------------------	---------------

11.2 Information on other hazards

Endocrine disrupting properties	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).



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 14 of 16
-------------------------	---------------------	------------------------------	----------------------

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	
Appropriate disposal / Product	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.
Waste codes according to EWC	none
Appropriate disposal /Packaging	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

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

15. REGULATORY INFORMATION



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 15 of 16
-------------------------	---------------------	------------------------------	----------------------

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.



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

Date: 03.11.2022	Version: 2.0	Supersedes version: -	Page 16 of 16
-------------------------	---------------------	------------------------------	----------------------

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.

AVIZ SANITAR
PENTRU PRODUSELE ALIMENTARE ȘI NEALIMENTARE Nr. P-17027/2023
Санитарное заключение для пищевых и непищевых продуктов
din/от 14 aprilie 2023

Prin prezentul aviz sanitar se confirmă că producerea, importul, utilizarea și desfacerea produselor / echipamentelor
Настоящим санитарным заключением подтверждается что производство, ввоз, использование и реализация продукции / оборудования
Soluție de spălat parbriz "IARNA" -20 C, -30 C; Soluție de spălat parbriz "VARA", lichid pentru aprinderea focului

sunt conforme Regulamentului (lor) sanitar (e) / соответствуют санитарному (ым) регламенту (ам) (se va indica denumirea completă a
Regulamentului (lor) sanitar (e) / указать полное наименование санитарного (ых) регламента (ов))
SF 41279445-001:2020, IT MD 41279445-001:2020, SM GOST R 51696:2003 Produse chimice de uz casnic

Organizația-producătoare/importatoare, țara de origine / организация произв./импортер, страна происхождения

"AMID-AUTO" SRL, Republica Moldova

Destinatarul avizului sanitar / получатель санитарного заключения

AMID-AUTO S.R.L., Republica Moldova, mun. Chișinău, sec. Botanica, str. Independenței, 42, ap./of. 20

Temei pentru recunoașterea conformității produselor Regulamentului (lor) sanitar (e) menționat (e) a servit /

Основанием для признания продукции указанному (ым) санитарному (ым) регламенту (ам) послужило

Demers, autorizație sanitară de funcționare, standard de firmă, instrucțiune tehnologică, rețeta, raport de încercări nr.69 din 17.05.2022, rapoarte a încercărilor de laborator nr.51007043-51007046 din 06.04.2023, din 11.04.2023
(a enumera documentele de însoțire, buletinele de analiză / перечислить сопроводительные док., протоколы исслед.)

Caracteristica sanitară a produselor / санитарная характеристика продукции:

Parametrii (factorii) / показатели (факторы)

Normativul sanitar / санитарный норматив

conform rapoartelor încercărilor de laborator nr.51007043-51007046 din 06.04.2023, din 11.04.2023

Domeniu de utilizare / Область применения:

întreținere auto

Condițiile necesare de utilizare, depozitare, transportare, măsurile de securitate / Необходимые условия использования, хранения, транспортировки, меры безопасности:

producerea, plasarea pe piață în condițiile respectării legislației în vigoare în Republica Moldova

AVIZUL SANITAR este valabil pînă la / Санитарное заключение действительно до: 30.04.2026

DIRECTORUL AGENȚIEI NAȚIONALE PENTRU SĂNĂTATE PUBLICĂ

Nicolae Jelamschi

Digitally signed by Jelamschi Nicolae
Date: 2023.04.14 11:46:18 EEST
Reason: MoldSign Signature
Location: Moldova



SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU)
2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 1 of 11

SAFETY DATA SHEET**1. Identification of the substance/mixture and of the company/ undertaking****1.1 Product identifier**

Product name: Active foam “Standart 1:3” Master’s Line

Mixture a unique formula identifier (UFI): 2890-C0CT-000K-XJUW

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

Relevant identified uses: Car body foam. For use by consumers.

Uses advised against: No data available.

1.3 Information about the manufacturer

Name: ArtHim LLC _

Ternopil'ska, 17/2a, Khmel'nitsky, Ukraine

Tel. /fax : +38 0382 72-55-18

E-mail: office@helpix.ua

1.4 Emergency Telephone Number

The State Medicines Control Agency (SMCA), Poison Information Bureau (PIB) (Lithuania)

Tel. No.: +370 5 236 20 52

Biroul RSI si Informare Toxicologica (Romania)

Tel. No.: +40 021 318 3606

2. Types of hazardous effects and conditions for their occurrence**2.1 Classification of the substance or mixture**

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Skin Corr. 1A; H314

Eye Dam. 1; H318

2.1.2. Additional information:

Full text of H phrases, hazard and EU hazard statements in Section 16.

2.2 Label elements

2.2.1 Label according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



Signal word: **Danger.**

SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU)
2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 2 of 11

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/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.

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.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Supplemental Hazard information (EU): None.

2.3 Other hazards

The product does not meet the criteria for a PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.

3. Composition/Information on ingredients

3.1 Substances

Not applicable (the product is a mixture).

3.2 Mixtures

Substance	CAS No.	EC/List No.	Classification:	Concentration (%)
			According Regulation EC No. 1272/2008	
Etidronic acid	2809-21-4	220-552-8	Skin Corr. 1B; H314 Eye Dam. 1; H318	4-5
Sodium hydroxide	1310-73-2	215-185-5	Skin Corr. 1A; H314 (Eye Irrit. 2; H319: 0.5 % ≤ C < 2 % Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0.5 % ≤ C < 2 %)	6.5-7.5
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	931-534-0	Skin Irrit. 2; H315 Eye Dam 1; H318	1.5-2.5
Sodium dodecyl sulphate	151-21-3	205-788-1	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam 1; H318	3.5-4.5
Propan-2-ol	67-63-0	200-661-7	Flam. Liq. 2; H225	2.5-3.5

SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU)
2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 3 of 11

			Eye Irrit. 2; H319 STOT SE 3; H336	
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Additional information: For full text of H-statements: see section 16.

4. First aid measures

4.1 Description of first aid measures

General information. Get medical attention immediately.

Following skin contact. Get medical attention immediately. Immediately rinse skin with water/shower.

Following eye contact. Get medical attention immediately. Immediately wash eyes with plenty of water.

Following inhalation. Move to fresh air. Call a physician if symptoms develop or persist.

Following ingestion. Rinse mouth. If ingestion of a large amount does occur, call a poison control centre immediately.

Self-protection of the first aider: To care for their own safety!

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. In case an intoxication is suspected, National Poisons Information Centre should be addressed immediately, number of Emergency telephone see in section 1.4.

5. Firefighting measures

General fire hazards. Clear fire area of all non-emergency personnel.

5.1 Extinguishing media

Suitable extinguishing media. Depending on the fire environment (water spray, foam, dry chemical powder or carbon dioxide (CO₂)).

Unsuitable extinguishing media. Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazard arising from the substance of mixture

Upon decomposition, this product emits carbon monoxide, carbon dioxide and etc.

5.3 Advice for firefighters

Special protective equipment for fire-fighters. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

Special fire-fighting procedures. Do not breathe fire released materials. Move containers away from fire area, if it can be done without risk. Use water mist cooling unopened containers. Cooling tanks pouring sufficient water and fire go out. Prevent the material from entering the drainage system, surface waters.

6. Accidental release measures

SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU)
2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 4 of 11

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel. Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up.

For emergency responders. Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2 Environmental precautions

Prevent contamination of soil and water. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Prevent vapour cloud. Prevent further leakage or spillage if safe to do so. Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with local regulations.

6.4 Reference to other sections

For personal protection, see Section 8. For waste disposal, see section 13.

7. Handling and storage**7.1 Precautions for safe handling**

Advice on safe handling. Put on appropriate personal protective equipment (see Section 8). Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Advice on protection against fire and explosion. Keep away from heat. Keep away from sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers closed when not in use. Do not store in direct sunlight. Store at ambient temperature and atmospheric pressure.

7.3 Specific end use(s)

Car body foam

8. Exposure Controls/Personal Protection**8.1 Control parameters**

Occupational exposure limits. No occupational exposure limits noted for the ingredient(s).

Biological limit values. No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures. Follow standard monitoring procedures.

8.2 Exposure controls

General information: Do not eat, drink, smoke at the workplace. Wash hands before breaks and after work.

APPROPRIATE ENGINEERING CONTROLS

SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU)
2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 5 of 11

Provide adequate general and local exhaust ventilation.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT

General information. Use personal protective equipment as required. Keep working clothes separately. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection. Wear protective goggles with side-shields according to EN 166.

Skin protection. Wear protective work clothing.

Hand protection. When contact is likely, appropriate wrist long chemical resistant gloves (EN 374).

Respiratory protection. General ventilation normally adequate. In case of inadequate ventilation or risk of inhalation of vapour, suitable respiratory equipment (breathing mask). Seek advice from local supervisor (EN 149).

Thermal hazards. Not applicable.

Hygiene measures. Handle in accordance with good industrial hygiene and safety practices. Eye wash fountain and emergency showers are recommended. Launder contaminated clothing before reuse.

8.3 Environmental exposure controls

Contain spills and prevent releases, and observe national regulations on emissions.

9. Physical and chemical properties

PHYSICAL STATE:	liquid
COLOUR:	yellow
ODOUR:	of used materials
MELTING POINT/FREEZING POINT:	not evaluated
BOILING POINT OR INITIAL BOILING POINT AND BOILING RANGE:	not evaluated
FLAMMABILITY (SOLID, LIQUID, GAS):	not flammable
FLASH POINT:	not applicable
AUTO-IGNITION TEMPERATURE:	not applicable
DECOMPOSITION TEMPERATURE:	not evaluated
pH:	12
KINEMATIC VISCOSITY:	not evaluated
SOLUBILITY:	not evaluated
PARTITION COEFFICIENT (N-OCTANOL/WATER):	not evaluated
VAPOUR PRESSURE:	not evaluated
DENSITY AND/OR RELATIVE DENSITY:	1.2 g/ml (20 °C)
RELATIVE VAPOUR DENSITY:	not evaluated
PARTICLE CHARACTERISTICS:	not applicable

9.2 Other information

SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU)
2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 6 of 11

9.2.1 Information with regard to physical hazard classes

None.

9.2.2 Other safety characteristics

No additional information.

10. Persistence and reactivity

10.1 Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2 Chemical Stability

Stable at normal conditions.

10.3 Possibility of hazardous reactions

No additional information.

10.4 Conditions to avoid

High temperatures and sources of ignition.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

In case of fire, may produce hazardous fumes like carbon monoxide, carbon dioxide and etc.

11. Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No. 1272/2008

Acute toxicity: No information available for the product.

Information on ingredients:

Etidronic acid, CAS No. 2809-21-4:

Acute Oral Toxicity: LD50 – 3130 mg/kg (rat);

Acute Dermal Toxicity: LD50 – >5000 ml/kg/24h (rabbit).

Sodium hydroxide, CAS No. 1310-73-2:

Acute Oral Toxicity: LD50 – 325 mg/kg (rabbit);

Acute Inhalation Toxicity: LC50 – 750 µg/l/2h (aerosol) (rat).

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts, CAS No. 68439-57-6:

Acute Oral Toxicity: LD50 – 2290 mg/kg (rat);

Acute Inhalation Toxicity: LC50 – >52 mg/l/4h (aerosol) (rat);

Acute Dermal Toxicity: LD50 – 6300 mg/kg/24h (rabbit).

Sodium dodecyl sulphate, CAS No. 151-21-3:

Acute Oral Toxicity: LD50 – 1200 mg/kg (rat);

Acute Dermal Toxicity: LD50 – >2000 mg/kg/24h (rat).

SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU)
2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 7 of 11

Propan-2-ol, CAS No. 67-63-0:

Acute Oral Toxicity: LD50 – 5.84 g/kg (rat);

Acute Inhalation Toxicity: LC50 – 5000 ppm/6h (vapour) (rat);

Acute Dermal Toxicity: LD50 – 16.4 mg/kg/24h (rabbit).

Skin corrosion/irritation. May cause severe skin burns.

Serious eye damage/eye irritation. May cause serious eye damage.

Respiratory or skin sensitisation. Not classified.

Germ cell mutagenicity. Not classified.

Carcinogenicity. Not classified.

Reproductive toxicity. Not classified.

STOT – single exposure. Not classified.

STOT – repeated exposure. Not classified.

Aspiration hazard. Not classified.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

None.

11.2.2 Other information

No data available.

12. Ecological information**12.1 Toxicity**

No information available for the product.

Information on ingredients:

Etidronic acid, CAS No. 2809-21-4:

LC50 for marine water fish: 2180 mg/l/96h (Cyprinodon variegatus);

NOEC: 60 mg/l/14d (Oncorhynchus mykiss);

EC50 for marine water invertebrates: 1770 mg/l/48h (Palaemonetes pugio);

NOEC: 6.75 mg/l/28d (Daphnia magna);

EC50 for freshwater algae: 12 mg/l/96h.

Sodium hydroxide, CAS No. 1310-73-2:

LC50 for freshwater fish: 35-189 mg/l;

EC50 for freshwater invertebrates: 30-1000 mg/l.

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts, CAS No. 68439-57-6:

LC50 for freshwater fish: 4.2 mg/l/96h (Danio rerio);

EC50 for freshwater invertebrates: 4.53 mg/l/48h (Ceriodaphnia dubia);

EC50 for marine water invertebrates: 2.08 mg/l/48h (Acartia tonsa);

NOEC: 2.42 mg/l/21d (Daphnia magna);

SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU)
2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 8 of 11

EC50 for marine water algae: 1.97 mg/l/72h (*Skeletonema costatum*);
EC10 or NOEC for marine water algae: 6.25 mg/l/72h (*Skeletonema costatum*).

Sodium dodecyl sulphate, CAS No. 151-21-3:

LC50 for freshwater fish: 29 mg/l/96h (*Pimephales promelas*);
LC50 for marine water fish: 4.1 mg/l/96h (*Cyprinodon variegatus*);
NOEC: ≥ 1.36 mg/l/42d (*Pimephales promelas*);
EC50 for freshwater invertebrates: 5.55 mg/l/48h (*Ceriodaphnia dubia*);
EC50 for marine water invertebrates: 3.15 mg/l/48h (*Artemia salina*);
NOEC: 0.88 mg/l/7d (*Ceriodaphnia dubia*);
EC50 for freshwater algae: 120 mg/l/72h (*Desmodesmus subspicatus*);
EC10 or NOEC for freshwater algae: 30 mg/l/72h (*Desmodesmus subspicatus*).

Propan-2-ol, CAS No. 67-63-0:

LC50 for freshwater fish: 9640 mg/l/96h (*Pimephales promelas*);
NOELR: >1000 mg/l/28d (*Danio rerio*);
EC50 for freshwater invertebrates: >10000 mg/l/24h (*Daphnia magna*);
NOELR: >1000 mg/l/21d (*Daphnia magna*);
LC3 for freshwater algae: 1800 mg/l/7d (*Scenedesmus quadricauda*).

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

Mobility. No data available.

12.5 Results of PBT and vPvB assessment

Not a PBT or vPvB substance or mixture.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No known significant effects or critical hazards.

13. Disposal consideration**13.1 Waste treatment methods**

Residual waste. Dispose of contents/container with local/regional/national/international regulations.

Contaminated packaging. No data available.

EU waste code. No data available.

Disposal methods/information. Review federal, state/provincial, and local government requirements prior to disposal.

14. Transport information

SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU) 2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 9 of 11

Transport only in accordance with ADR for road haulage, RID for rail transportation, ADN/IMDG for carriage by vessel/sea and IATA for carriage by air.

14.1 UN number or ID number. None.

14.2 UN proper shipping name. None.

14.3 Transport hazard class (es). None.

14.4 Packing group. None.

14.5 Environmental hazards. No.

14.6 Special precautions for user. Before use read the safety instructions in the safety data sheet and emergency procedures.

14.7 Maritime transport in bulk according to IMO instruments. Not applicable.

15. Regulatory information

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

- Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No.793/93, Commission Regulation (EC) No. 1488/94, Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Official Journal of the European Union No. L 396, 30-12-2006, error correction – No. L 136/3, 2007-5-29);
- COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (OJ L 203, 26.6.2020, p. 28–58);
- REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents (OJ L 104/1, 8.4.2004, p.001-0035);
- The European Agreement concerning International Carriage of Dangerous Goods by Road (ADR).

15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.

16. Other information

16.1 Indication of changes

Information contained in the Regulation 1907/2006/EC with the Regulation 2020/878.

Indication of changes: –

Date of filling: 17-03-2023

Revision: –

Version No.: 1

16.2 Full text of hazard and precautionary statements

H225 Highly flammable liquid and vapour.

SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU)
2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 10 of 11

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/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.
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.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Supplemental label information: None.

Abbreviations:

Flam. Liq. 2 – Flammable liquids; Hazard Category 2.
Acute Tox. 4 – Acute toxicity (oral); Hazard Category 4.
Skin Corr. 1A – Skin corrosion; Hazard Sub-category 1A.
Skin Corr. 1B – Skin corrosion; Hazard Sub-category 1B.
Skin Irrit. 2 – Skin irritation; Hazard Category 2.
Eye Dam. 1 – Serious eye damage; Hazard Category 1.
Eye Irrit. 2 – Eye irritation; Hazard Category 2.
STOT SE 3 – Specific target organ toxicity after single exposure; Hazard Category 3.

Acronyms:

ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID – Regulations concerning the International Carriage of Dangerous Goods by Rail.
IMDG – International Maritime Dangerous Goods.
IATA – International Air Transport Association.
ICAO – International Civil Aviation Organization.
IMO – International Maritime Organization.
vPvB – Very Persistent and Very Bioaccumulative.
PBT – Persistent, Bioaccumulative and Toxic substance.

SAFETY DATA SHEET

Prepared according to the European Commission Regulations (EU)
2020/878

Date of filling: 17 03 2023

Last revision date: –

Version: 1

PRODUCT: Active foam “Standart 1:3” Master’s Line

Page 11 of 11

LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose).

LC50 – Lethal Concentration to 50 % of a test population.

EC50 – Effective concentration to 50% of a test population (Half maximal effective concentration).

IC50 – Inhibitory concentration to 50% of a test population (Half maximal inhibitory concentration).

CAS – Chemical Abstracts Service number.

CEN – European Committee for Standardization.

STOT – Specific Target Organ Toxicity.

DNEL – Derived No-Effect Level.

PNEC – Predicted No Effect Concentration.

NOEC – No effect concentration.

STEL – Short Term Exposure Limit.

TWA – Time Weighted Averages.

SDS – Safety Data Sheet.

KEY LITERATURE REFERENCES AND SOURCES FOR DATA:

- The data provided by the European Chemicals Bureau (ECB), European Chemicals Agency (ECHA), Swedish Chemicals Agency (KEMI), International Laboratories Organization (ILO), the TOXNET Internet pages.

Disclaimer

Information is correct to the best of our knowledge at the date of the SDS publication. It is not a specification sheet nor should any displayed data be construed as a specification. The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

SwdRheinol LKW EP-Radlagerfett KP2N-30

Литиевая консистентная смазка для подшипников ступицы колеса

Описание продукта и его свойства

SwdRheinol LKW EP-Radlagerfett KP2N-30 - высококачественная многоцелевая смазка, разработанная для длительной работы в шарико- и роликоподшипниках при высоких температурах. Производится на основе минерального базового масла и термостойкого литиевого комплексного мыла, в качестве загустителя. Кроме этого, содержит специальные присадки, эффективно улучшающие противозадирные свойства и гарантирующие стабильную смазку, даже в экстремальных условиях эксплуатации. Длительная работа без замены, отличные антикоррозионные свойства и прекрасная стойкость к окислению, делают **SwdRheinol LKW EP-Radlagerfett KP2N-30** идеально пригодной для постоянной смазки шарико- и роликоподшипников работающих при большой температурной нагрузкой. Именно в этом отношении консистентная смазка **SwdRheinol LKW EP-Radlagerfett KP2N-30** обладает существенным преимуществом по сравнению с традиционными смазками на основе литиевого мыла.

SwdRheinol LKW EP-Radlagerfett KP2N-30 - рекомендуется для смазки скоростных шариковых и роликовых подшипников, ступиц колёс грузовых и легковых автомобилей, работающих как на малых, так и на высоких скоростях и подвергающихся высоким температурным (до 180°C) и механическим нагрузкам, в течении длительного времени или всего срока эксплуатации.

Спецификации

- ❖ ISO 12924 - L-XC(F)DIB2
- ❖ DIN 51502 - KP2N-30
- ❖ Volvo 1277.2
- ❖ NLGI GC-LB

Типичные характеристики

SwdRheinol LKW EP-Radlagerfett KP2N-30	Ед. Изм.	Показатели	Метод испытания
Загуститель		литий	
Базовое масло		минеральное	
Цвет		синий	визуально
Класс - NLGI		2	ASTM D 217
Температура каплепадения	°C	> 260	IP 396
Вязкость базового масла при 40°C	мм ² /с	210	ASTM D 7152
Вязкость базового масла при 100°C	мм ² /с	16	ASTM D 7152
Пенетрация, 60 циклов		265-295	ISO 2137
Нагрузка при испытании методом четырех шаров	H	2800	DIN 51350:4
Водостойкость при 90°C		1	DIN 51807:1
Воздействие потока воды при 38°C	%	< 10	ISO 11009
Етсog - тест дистиллированная вода		≤ 2 - 2	ISO 11007
Тест на текучесть при -30°C	гПа	< 1400	DIN 51805
Тест - SKF R2F B при 140°C		успешно пройден	SKF
Плотность при 20°C	кг/м ³	900	IP 530
Диапазон рабочих температур	°C	от -30 до +140 (макс. +180)	
Артикул №:		30983	

Значения приведенных физико-химических показателей являются типичными для выпускаемой в настоящее время продукции.

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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



YUKO-є зареєстрованою торговою маркою ТОВ "СП ЮКОЙЛ"

Випробувальна лабораторія ТОВ «СП ЮКОЙЛ» атестована на проведення вимірювань показників якості нафтопродуктів, технічних рідин та мастильних матеріалів.
Свідцтво про визнання технічної компетентності № АВ-ЗП 50-24 від 31.10.2024 р. видане ДП "ДНІПРОСТАНДАРТМЕТРОЛОГІЯ", чинне до 31.10.2027 р.

Паспорт якості фасованої продукції №08058.01.01.1 Мастило YUKO LITOPLEX EP (NLGI 00)

Виробник: ТОВ «СП ЮКОЙЛ» за ТУ У 20.5-31852954-068:2021
Розфасовано: ТОВ «СП ЮКОЙЛ» за ТУ У 23.2-31852954-027:2006
Клас NLGI **NLGI 00**
Клас експлуатаційних властивостей: KP00P-30; ISO-L-XBEBB 00



Дата виготовлення: Лютий 2025р.
Тара: відро 20л жерсть; об'єм партії 33 шт.
Номер партії: 08058.18.02.25.01.

Ф.5 СТП014

Назва показника	Вимоги НД	Фактично	Метод випробувань
Зовнішній вигляд	Однорідна мазь гладкої структури	Однорідна мазь гладкої структури синього кольору	ГСТУ 38.001 або п. 6.3 цих ТУ
Пенетрація при 25°C з перемішуванням, 0,1 мм	400-430	430	ГОСТ 5346, метод Б або ASTM D217
В'язкість ефективна при мінус 20°C та середньому градієнті швидкості деформації 10 с-1, Па·с, не більше	1 200	635	ГОСТ 7163 або ASTM D1092
Межа міцності на зсув при температурі 50°C, Па, не більше	700	25	ГОСТ 7143 метод Б
Випарність, %, не більше	2	0,84	ГОСТ 9566 з доп. за п. 6.4 цих ТУ
Корозійний вплив на метали	Витримує	Витримує	ГОСТ 9.080 з доп. за п. 6.5 цих ТУ
Трибологічні характеристики на 4-х кульковій машині при температурі (20±5)°C:			ГОСТ 9490 або ASTM D2596
- навантаження зварювання (Рзв), Н, не менше	3 283	3 283	
- критичне навантаження (Рк), Н, не менше	980	1 039	
- індекс задиру (Із), Н, не менше	440	490	
Стійкість до окислення, мг КОН/г, не більше	2	0,60	ГОСТ 5734
Вміст води	Відсутність	Відсутність	ГОСТ 2477 або ASTM D128
Масова частка механічних домішок, %, не більше	0,05	0,032	ГОСТ 6479 або ASTM D128

Паспорт якості дійсний тільки за наявності печатки.

Висновок: якість продукції відповідає вимогам нормативної документації

Гарантійний термін зберігання - 5 років



Начальник ВТК

Юлія ЄВТУШЕНКО

MATERIAL SAFETY DATA SHEET

Regulation(EC) No 1907/2006(REACH), Annex II

(COMMISSION REGULATION(EU) NO 453/2010)

Version 1

Issue Date 29 Dec 2023

Production Name antirust lubricant

Revision date 29 Dec 2023

Section 1-Chemical product and company identification

Trade name: Antirust lubricant

Size: 100ml-450ml

Effective Date: 2023 12 18

MSDS#: 2020748858

Information department: Technology Department

Emergency information: TEL 86-20-82833999 if located outside of China

Section 2 - Composition / Information on Ingredients

ITME	Ingredient Name	CAS Number	% weight
01	Refined white oil	8012-95-1	10%
02	Petroleum sulfonate	61789-85-3	5%
03	Pentaerythritol oleate	19321-40-5	15%
04	Propane	74-98-6	35%
05	Butane	106-97-8	35%

Section 3 - Hazards Identification

3.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

flammable aerosols Category 1 -(H222)

Germ cell mutagenicity Category 1B -(H340)

Carcinogenicity Category 1B -(H350)

Reproductive Toxicity Category 2 -(H361)

Aspiration toxicity Category 1 -(H304)

Classification according to Directive 67/548/EEC or 1999/45/EC

Xn -Harmful

F+ -Extremely flammable

F+; R12

Carcinogenic, Category 1; R45

Mutagenic Category 2; R46

Xn; R65

Toxic for reproduction Category 3; R63mouth, throat and stomach.

3.2 Label elements Symbols/Pictograms



Signal word

Danger

Hazard Statements

H222 -Extremely flammable aerosol

H304 -May be fatal if swallowed and enters airways

H340 -May cause genetic defects

H350 -May cause cancer

H361 -Suspected of damaging fertility or the unborn child

P264 -Wash face, hands and any exposed skin thoroughly after handling

P273 -Avoid release to the environment

P301 + P310 -IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P331 -Do NOT induce vomiting

P405 -Store locked up

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

P210 -Keep away from heat/sparks/open flames/hot surfaces. -No smoking

P211 -Do not spray on an open flame or other ignition source

P251 -Pressurized container: Do not pierce or burn, even after use

P410 + P412 -Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 ° F

3.3 Other hazards

No information available

Section 4 - First aid measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

FIRST AID - SKIN CONTACT: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: Get medical attention immediately. If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Section 5 - Fire-Fighting Measures

Extinguishing Media: Dry chemical, foam, carbon dioxide., sand . Water jets are not suitable for fire fighting.

General Fire Hazards: Flammable liquid. Do not spray near sources of ignition such as open flames, sparks, hot surfaces or burning cigarettes. Aerosol cans may explode if heated above 54 degrees Celsius.

Fire-Fighting Equipment/Instructions: Wear self-contained breathing apparatus. If possible remove aerosol containers from the vicinity of the fire. Otherwise keep containers as cool as possible by spraying with water from a protected position.

Section 6 - Accidental Release Measures

Containment Procedures: Contain the discharge material. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Clean-Up Procedures: Attempt to reclaim the free product, if this is possible. If molten product spilled, solidify and recover.

Evacuation Procedures: Isolate area. Keep unnecessary personnel away.

Special Instructions: Avoid inhalation of fumes from molten product. Avoid skin contact with molten resins. Wear appropriate protective equipment and clothing during clean-up. Do not allow the spilled product to enter public drainage systems or open water courses.

Section 7 - Handling and Storage

Procedures for Handling: Avoid breathing fumes if this product is used at high temperatures. Keep away from potential sources of ignition. Wash hands after handling and before eating.

Recommended Storage Methods: Keep the container tightly closed and in a cool, well-ventilated place. Store away from strong oxidizers. Do not store this material in open and unlabeled containers.

Section 8 - Exposure Controls / Personal Protection

Exposure Guidelines:

A. General Product Information - If oil mists are generated, observe the OSHA exposure limit of 5 mg/m³.

B. Component Exposure Limits - No ACGIH, NIOSH or OSHA exposure guidelines listed for the product's components.

Engineering Controls: Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

Eye / Face Protection: Wear safety goggles or faceshield when working with melted material.

Skin Protection: Chemically resistant gloves with thermal protection when working with melted paraffin.

Respiratory Protection: Under normal conditions, respirator is not normally required.

General: Use good industrial hygiene practices.

Section 9 - Physical and Chemical Properties

Physical State: liquid

Appearance: transparent

Odor: Not available

Odor Threshold: Not available

Vapor Pressure: Compressed gas

Vapor Density:(water=1):0.8

Flash Point:N/A

Boiling Point: >35°C

Melting Point: <0°C

% Volatile :40-60

Evaporation Rate: slow

pH: N/A

Section 10 - Stability and Reactivity

Chemical Stability: Stable

Hazardous Polymerization: Hazard polymerization will not occur.

Chemical Incompatibilities: Strong oxidizing agents, strong acids and strong base

Conditions to Avoid (Stability): Avoid excessive heat and all sources of ignition.

Hazardous Decomposition Products: Carbon dioxide, carbon monoxide.

Section 11- Toxicological Information

Acute Toxicity / Target Organ Information:

A. General Product / Component Information - This material is typically inert. Paraffin fumes are a result of overheating product. Fumes are known to be mildly irritating to the nose, throat, and eyes.

B. Component LD50 / LC50 - No data available for product.

Epidemiology: No data available for product.

Carcinogenicity:

A. General Product / Component Information - Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.

B. Component Carcinogenicity Listings - None of this product's components are listed by ACGIH, IARC, NIOSH, NTP or OSHA.

Teratogenicity / Reproductive Effects: No data available for the product as a whole.

Neurotoxicity: No data available for the product as a whole.

Mutagenicity: No data available on this product as a whole.

Other Information: No other information available.

Section 12 - Ecological Information

Ecotoxicity: No information is available on ecotoxicity of this product. Keep product out of sewers and waterways.

Environmental Fate: No information is available.

Section 13 - Disposal Considerations

U.S. EPA Waste Number & Descriptions:

A. General Product Information - Product as shipped does not meet the definition or characteristics of a hazardous waste.

B. Component Waste Numbers - No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions: Incinerate the material under controlled conditions in an approved incinerator.

Section 14 - Transport Information

Proper Shipping Name: Aerosol

Hazard Class: 2.1

Identification number: N/A

ADR/RID class: 2.1

IMDG Class:IMO 2.1

ICAO/IATA Class: 2.1

Packing Group: II

EMS Number: F-D S-D S-U

MFAG: F-D S-D S-U

UN-Number: 1950

Section 15 - Regulatory Information

U.S. Federal Regulatory Information:

A. General Product Information - All components of this product are listed on the U.S. EPA TSCA Inventory.

B. Component Information - None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) or CERCLA (40 CFR 302.4).

State Regulations:

A. General Product Information - No components require labeling under California Proposition 65.

B. Component Information - None of this product's components are listed on the state lists from CA, FL, MA, MN, NJ, or PA.

Other Regulations:

A. General Product Information - All known (non-proprietary) components of this product are listed on the EINECS inventory of existing chemicals.

B. Component Information - None of this product's components are listed on the Canadian Controlled Product Ingredient Disclosure List.

Section 16 - Other Information

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Veslee be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Veslee has been advised of the possibility of such damages



MANNOL White Grease 8121

Белая минеральная смазка на основе литиевого мыла, обладающая отличной термоустойчивостью и сопротивлением к вымыванию. Предназначается для обработки деталей механизмов, подшипников, шарниров, зубчатых и других передач, резьбовых соединений. Продукт сокращает трение, отталкивает влагу, предотвращает отсыревание, защищает от коррозии, препятствует примерзанию элементов. Средство применимо в автомобиле и быту.

Свойства продукта:

- Быстро и глубоко проникает, не оставляя после себя липкой плёнки;
- Создаёт плотный защитный слой. Обеспечивает надежную смазку металлических деталей. Входящие в состав ингибиторы коррозии надежно защищают обрабатываемые поверхности от окисления и износа;
- Плотный защитный слой устойчив к трению, давлению, вибрации;
- Обладает повышенной вязкостью, при этом не содержит силиконов и сольвентов;
- Обладает эластичностью. Хорошо защищая поверхность гибкого материала, полностью его обволакивая включая все неровности;
- Простота использования, быстрое действие, экономный расход.

Смазка идеально подходит для применения в автомобилях, водной технике, сельскохозяйственном и садовом оборудовании, промышленности, в быту и т.д. Применяется для смазки и защиты деталей тормозной системы, клемм аккумуляторов, замков и петель дверей, капотов и багажников, механизмов стеклоочистителей, стеклоподъемников, салазок сидений, металлических рычагов, тросов и других различных движущихся механизмов.

ТОВ «СП ЮКОЙЛ». Завод технічних олів.
Україна, 09100, Київська обл., Білоцерківський р-н, місто Біла Церква, вул.Пулюя 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. 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

WEB: www.yuko.eu
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Member of:



ТОВ «СП ЮКОЙЛ». Завод технічних олиव.
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. Свідоцтво про визнання технічної компетентності № АВ 43-22 від 22.11.2022р. видане ДП «ЗАПОРІЖЖЯСТАНДАРТМЕТРОЛОГІЯ», чинне до 16.11.2024 р

Паспорт якості фасованої продукції №15087.01.01.1

Мастило YUKO Солідол Жировий

ГОСТ 1033-79

Виробник: ТОВ «СП ЮКОЙЛ»
Розфасовано: ТОВ «СП ЮКОЙЛ» за ТУ У 23.2-31852954-027:2006
Клас NLGI **NLGI 2/3**
Дата виготовлення: Квітень 2024р.
Тара: відро 5л ПЕ
Номер партії: 15087.10.04.24.01.

Ф.5 СТП014

Назва показника	Вимоги НД	Фактично	Метод випробувань
Зовнішній вигляд	Однорідне мастило від світло-жовтого до темно-коричнев ого кольору	Однорідне мастило коричневого кольору	ГОСТ 1033 п. 4.2
Температура крапання, °С, не нижче	78	98,0	ГОСТ 6793
В'язкість ефективна при 0°С та середньому градієнті швидкості деформації 10 с-1, Па·с, не більше	250	185	ГОСТ 7163
Пенетрація при 25 °С з перемішуванням, мм·10-1	230-290	240	ГОСТ 5346, метод В
Межа міцності на зсув при 50°С, Па, не менше	196	355	ГОСТ 7143
Масова частка вільного луку в перерахунку на NaOH, %, не більше	0,2	0,062	ГОСТ 6707
Масова частка вільних органічних кислот	Відсутність	Відсутність	ГОСТ 6707
Масова частка механічних домішок, не розчинних у соляній кислоті, %, не більше	Відсутність	Відсутність	ГОСТ 6479
Масова частка води, %, не більше	2,5	0,1	ГОСТ 2477
Масова частка кальцієвих мил жирних кислот, які входять до складу природних жирів, %, не менше	11,0	11,0	ГОСТ 5211

Паспорт якості дійсний тільки за наявності печатки.

Висновок: якість продукції відповідає вимогам ГОСТ 1033-79 і ТУ У 23.2-31852954-027:2006

Гарантійний термін зберігання - 5 років
М. П.

Начальник ВТК

Анна ЛАРЧЕНКО



Mobil Polyrex EM Series

Electric-Motor Bearing Grease

Product Description

Super-premium Mobil Polyrex EM Series grease is specially formulated for electric-motor bearings. The advanced thickener formulation and proprietary manufacturing techniques provide improved bearing performance and protection for long electric motor life.

Features & Benefits

Mobil Polyrex EM and Mobil Polyrex EM 103 offer the following features and benefits:

Features	Advantages and Potential Benefits
Outstanding grease life	Outstanding long-life, high-temperature lubrication of ball and roller bearings, particularly in sealed-for-life applications
Advanced polyurea thickener	Increased durability versus conventional polyurea greases when subjected to mechanical shear forces
Excellent corrosion resistance	Mobil Polyrex EM and Mobil Polyrex EM 103 provide protection against rust and corrosion. Mobil Polyrex EM provides additional protection under mild salt-water wash conditions versus Polyrex EM 103
Low-noise properties	Mobil Polyrex EM is suitable for lubrication of ball bearings in many noise-sensitive applications

Applications

Mobil Polyrex EM greases are recommended by many major bearing and electric motor manufacturers for long-life lubrication of electric motor ball and roller bearings.

Mobil Polyrex EM 103 is more specifically recommended for applications such as vertically mounted bearings, or very large motors where a stiffer grease consistency may be required by the OEM, and low noise properties are not required.

Mobil Polyrex EM greases have been shown to be compatible with a number of ExxonMobil lithium complex greases, as well as competitive electric motor mineral polyurea products, as determined by the methodology of ASTM D6185. For specific questions about grease compatibility, contact your Mobil representative.

Key applications include:

- Electric-motor bearings
- Fin-fan bearings
- High-temperature pump bearings
- Factory-filled, sealed-for-life ball bearings
- Ball or roller bearings operating at high temperatures where low oil separation is required
- Polyrex EM for ball or roller bearings operating in noise sensitive environments



Typical Properties

	Mobil Polyrex EM	Mobil Polyrex EM 103
NLGI Grade	2	3
Color	Blue	Blue
Base Oil Viscosity, ASTM D 445		
cSt @ 40°C	115	115
cSt @ 100°C	12.2	12.2
Mineral Oil Viscosity Index, ASTM D 2270	95	95
Penetration, ASTM D217 worked, 60x, mm/10	285	250
Penetration Change after 100.000 strokes, ASTM D217, mm/10	40	40
Dropping Point, ASTM D 2265, °C	260	270
Oil separation test, ASTM D 1742, %	0.5	0.1
High Temperature Grease Life, ASTM D 3336, Hours @ 177°C	750+	750+
4-Ball Wear Scar, ASTM D 2266, @ 40kg, 1200 rpm, 75°C, 1 hr, mm	0.41	0.6
Low Temperature Torque, ASTM D 1478, g-cm @ -29°C		
Starting	7500	9300
Running	800	1000
EMCOR Corrosion Performance, 10% Synthetic Sea Water ASTM D 6138 (Prepared As Per ASTM D 665B)	0,1 (No Rust)	-
Rust Protection, ASTM D 1743, Distilled Water	Pass	Pass
Copper Corrosion Resistance, ASTM D 4048	1A	1A
Water Washout, ASTM D 1264, %	1.9	0.8

Health & Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

The Mobil logotype, the Pegasus design, and Polyrex EM are trademarks of Exxon Mobil Corporation, or one of its subsidiaries



	ALCO QUALITY ASSURANCE LABORATORY TEST REPORT 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.: 2024624
Date of issue: 25/04/2024

Test sample

Product: AVTOIL 80W90 GL-5
Batch number: 2404624
Tank ID: T41.2

Manufacture date: 25/04/2024
Date of sampling: 25/04/2024
Date of analysis: 25/04/2024

Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 100 °C	mm ² /s	ASTM D445	13.5-18.5	14.69	Pass
Viscosity index	-	ASTM D2270	Min. 90	93	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Flash Point, COC	°C	ASTM D92	Min. 200	218	Pass
Pour Point	°C	ASTM D97	Max. -30	-33	Pass
Color.	-	ASTM D1500	Max. 6.0	3.9	Pass
Density at 15 °C	g/cm ³	ASTM D4052	Test & Report	0.8952	Pass

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.

Notes & Instructions:

- Tests conducted according to International Standard Test Methods are routinely verified to be in compliance with the latest published versions. Minor changes may be made where they have no material impact on test results and are necessitated by reasons such as safety, environmental standards and method effectiveness.
- This certificate is only valid in its entirety.
- This certificate shall not be reproduced except in full, without the written approval of the laboratory.

Authorised singnatory



Allahverdiyeva Aytan
Head of Laboratory



Isgandarli Nazrin
Lead Chemical Engineer



	ALCO QUALITY ASSURANCE LABORATORY TEST REPORT 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.: 20241029
Date of issue: 02/07/2024

Test sample

Product: AVTOIL INDUSTRIAL HYDRAULIC HLP 46
Batch number: 24071029
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 ² /s	ASTM D445	41.4-50.6	46.09	Pass
Viscosity index	-	ASTM D2270	Min. 90	108	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Flash Point, COC	°C	ASTM D92	Min. 185	224	Pass
Pour Point	°C	ASTM D97	Max. -24	-24	Pass
Color	-	ASTM D1500	Test & Report	2.0	Pass
Density at 15 °C	g/cm ³	ASTM D4052	Test & Report	0.8719	Pass

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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Authorised singnatory



Allahverdiyeva Aytan
Head of Laboratory



Isgandarli Nazrin
Lead Chemical Engineer

	ALCO QUALITY ASSURANCE LABORATORY TEST REPORT 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.: 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 ² /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 ³	ASTM D4052	Test&Report	0.8770	Pass

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.

Notes & Instructions:

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Authorised singnatory



Allahverdiyeva Aytan
Head of Laboratory



Isgandarli Nazrin
Lead Chemical Engineer



LLC «JV YUKOIL»

48A Ivana Pulyuya str., Bila Tserkva, Kyiv region, Ukraine, 09100

Hot-line: +38 (0) 800 60 5555

Tel: +38 (061) 222 80 25 (laboratory)

State register No. 31852954



Testing laboratory of JV "YUKOIL" LLC is certified for carrying out tests of quality parameters of petroleum products, technical fluids and lubricants. Certificate of technical competence recognition № AB 83-21 dated 16.11.2021 is issued by the State-owned enterprise "ZAPORIZHYASTANDARTMETROLOGIA", valid till 16.11.2024

Quality Certificate No 04100.01.01.1

Four-stroke engine oil YUKO MASTER SYNT 4T 10W-30

Manufacturer JV YUKOIL LLC

Packed by JV YUKOIL LLC

Viscosity grade: **SAE 10W-30**

Quality Index: **API SL/CF, JASO MA2**

Production date: January 2024

Package: canister 1L PE

Batch No: 04100.25.01.24.01.



Test	Norm	Result	Test method
Density at 20°C, kg/m³, not more than	900	873,1	ASTM D1298
Kinematic viscosity at 100°C, mm²/s	9,3 - 12,5	11,53	ASTM D445
Viscosity index, not less than	130	138	ASTM D2270
Open cup flash point, °C, not less than	200	216	ASTM D92
Pour point, °C, not high than	- 32	- 37	ASTM D97
Mass fraction of mechanical impurities, %, not more than	0,025	0,023	GOST 6370
Water content, %, not more than	traces	traces	ASTM D95
Color on colorimetr, in diluted ratio 15:85, not more	3,5	1,0	ASTM D1500
TBN, mg KOH/g, not less than	5,5	6,03	ASTM D4739 or ASTM D2896
Mass fraction of active elements, %, not less than			ASTM D6481 or ASTM D6443 or ASTM D4927
- calcium	0,2	0,222	ASTM D6481 or ASTM D6443 or ASTM D4927
- zinc	0,08	0,088	ASTM D6481 or ASTM D6443 or ASTM D4927
Sulphated ash, %, not more than	1,2	0,89	ASTM D874
CCS at minus 25°C, mPa, not more than	7 000	6 589	ASTM D5293

Result: the product quality meets the standard of

seal

Head of Quality Assurance Department

WEB: www.yuko.eu

Hot-line: +38 (0) 800 60 5555

E-mail: support@yukoil.com

Tel.: +38 (061) 222 80 32

Member of:



	ALCO QUALITY ASSURANCE LABORATORY TEST REPORT 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.: 20242038
Date of issue: 29/11/2024

Test sample

Product: AVTOIL DYNAMIC 10W-40 SL/CF
Batch number: 24112038
Tank ID: T41.4

Manufacture date: 29/11/2024
Date of sampling: 29/11/2024
Date of analysis: 29/11/2024

Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 100 °C	mm ² /s	ASTM D445	12.5-16.3	13.92	Pass
Viscosity index	-	ASTM D2270	Min. 125	153	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Pour Point	°C	ASTM D97	Max. -30	-33	Pass
TBN	mg KOH/g	ASTM D2896	Min. 6.0	6.3	Pass
Color	-	ASTM D1500	Test & Report	2.7	Pass
Density at 15 °C	g/cm ³	ASTM D4052	Test & Report	0.8746	Pass

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.

	ALCO QUALITY ASSURANCE LABORATORY TEST REPORT Accreditation No: AZS ISO/IEC 17025:2020/AZ 01.0571.01.21	
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Approved by



Aytan Allahverdiyeva
Head of Laboratory



Form No.: 003-EN
Issue date: 10.12.2022

CERTIFICATE OF ANALYSIS

Accreditation No: AZS ISO/IEC 17025:2020/AZ 01.0571.01.21

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

Certificate No.: 202306900
Date of issue: 21/06/2023

Test sample

Product: AVTOIL 10W40 SG/CD
Material ID: M0000166
Date of sampling: 21/06/2023

Manufacture date: 21/06/2023
Batch number: 2306900
Tank ID: T41.1

Test result

Date of analysis: 21/06/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion
Appearance	-	Bright & Clear	Bright & Clear	Visual	Pass
Kinematic viscosity at 100 °C	mm ² /s	14.10	12.5-16.3	ASTM D445	Pass
Viscosity index, min.	-	139	Min. 125	ASTM D2270	Pass
Water content	%	None	Max. 0.05	ASTM D95	Pass
Flash Point, min.	°C	224	Min. 205	ASTM D92	Pass
Pour Point COC, max.	°C	-35	Max. -35	ASTM D97	Pass
Color	-	1.4	Test & Report	ASTM D1500	Pass
Density at 20 °C, max.	g/cm ³	0.8633	Test & Report	ASTM D4052	Pass

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.

Notes & Instructions:

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Authorised singnatory



Matilda Yusifova
Head of Laboratory

	ALCO QUALITY ASSURANCE LABORATORY TEST REPORT 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.: 20242038
Date of issue: 29/11/2024

Test sample

Product: AVTOIL DYNAMIC 10W-40 SL/CF
Batch number: 24112038
Tank ID: T41.4

Manufacture date: 29/11/2024
Date of sampling: 29/11/2024
Date of analysis: 29/11/2024

Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 100 °C	mm ² /s	ASTM D445	12.5-16.3	13.92	Pass
Viscosity index	-	ASTM D2270	Min. 125	153	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Pour Point	°C	ASTM D97	Max. -30	-33	Pass
TBN	mg KOH/g	ASTM D2896	Min. 6.0	6.3	Pass
Color	-	ASTM D1500	Test & Report	2.7	Pass
Density at 15 °C	g/cm ³	ASTM D4052	Test & Report	0.8746	Pass

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.

	ALCO QUALITY ASSURANCE LABORATORY TEST REPORT Accreditation No: AZS ISO/IEC 17025:2020/AZ 01.0571.01.21	
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Notes & Instructions:

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Approved by



Aytan Allahverdiyeva
Head of Laboratory



	ALCO QUALITY ASSURANCE LABORATORY TEST REPORT 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.: 20241022-1
Date of issue: 05/07/2024

Test sample

Product: AVTOIL 15W40 SG/CD
Batch number: 24071022-1
Tank ID: T41.2

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 100 °C	mm ² /s	ASTM D445	12.5-16.3	13.90	Pass
Viscosity index	-	ASTM D2270	Min. 120	148	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Flash Point, COC	°C	ASTM D92	Min. 215	238	Pass
Pour Point	°C	ASTM D97	Max. -30	-30	Pass
Color	-	ASTM D1500	Test & Report	2.5	Pass
Density at 15 °C	g/cm ³	ASTM D4052	Test & Report	0.8700	Pass

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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Authorised singnatory



Allahverdiyeva Aytan
Head of Laboratory



Isgandarli Nazrin
Lead Chemical Engineer

ТОВ «СП ЮКОЙЛ». Завод технічних олив.
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. Свідоцтво про визнання технічної компетентності № АВ 43-22 від 22.11.2022р. видане ДП «ЗАПОРІЖЖЯСТАНДАРТМЕТРОЛОГІЯ», чинне до 16.11.2024 р

Паспорт якості фасованої продукції №25050.01.01.1
Олива для малих чотирьохтактних бензинових двигунів YUKO
SEMISYNTHETIC 4T 10W-40
ТУ У 23.2-31852954-038:2008

Виробник: ТОВ «СП ЮКОЙЛ»
Розфасовано: ТОВ «СП ЮКОЙЛ» за ТУ У 23.2-31852954-027:2006
Клас в'язкості: **SAE 10W-40**
Клас експлуатаційних властивостей: **API SL JASO MA2**

Дата виготовлення: Червень 2024р.
Тара: каністра 1л ПЕ
Номер партії: 25050.18.06.24.01.

Ф.5 СТП014

Назва показника	Вимоги НД	Фактично	Метод випробувань
Густина при 20°C, кг/м³, не більше	900	871,1	ГОСТ 3900 або ASTM D1298
В'язкість кінематична при температурі 100°C, мм²/с	12,5 - 16,3	14,27	ДСТУ ГОСТ 33 або ASTM D445
Індекс в'язкості, не менше	140	151	ДСТУ ГОСТ 25371 або ASTM D2270
Температура спалаху, визначена у відкритому тиглі, °C, не нижче	200	218	ДСТУ ГОСТ 4333 або ASTM D92
Температура застигання, °C, не вище	- 32	- 40	ГОСТ 20287 або ASTM D97
Масова частка механічних домішок, %, не більше	0,015	0,013	ГОСТ 6370
Масова частка води, %, не більше	Сліди	Сліди	ГОСТ 2477 або ASTM D95
Колір на колориметрі ЦНТ, з розбавленням 15:85 одиниць ЦНТ, не більше	3,5	1,0	ГОСТ 20284 або ASTM D1500
Лужне число, мг КОН/г, не менше	5,0	6,08	ДСТУ 5094 або ГОСТ 11362 або ASTM D4739 або ASTM D2896
Масова частка активних елементів, %, не менше			ГОСТ 13538 або ASTM D6481 або ASTM D6443 або ASTM D4927
- кальцію	0,19	0,223	
- цинку	0,08	0,094	
Зольність сульфатна, %, не більше	1,0	0,90	ДСТУ ISO 3987 або ASTM D874
В'язкість динамічна, мПа·с			ДСТУ 8349 або ASTM D5293
- при мінус 25°C	7 000	6 900	

Паспорт якості дійсний тільки за наявності печатки.

Висновок: якість продукції відповідає вимогам ТУ У 23.2-31852954-038:2008 і ТУ У 23.2-31852954-027:2006

Гарантійний термін зберігання - 5 років
М. П.

Начальник ВТК

Анна ЛАРЧЕНКО



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

Certificate No.: 2024759
Date of issue: 13/05/2024

Test sample

Product: AVTOIL Двухтактное 2T
Batch number: 2405759
Tank ID: T41.4

Manufacture date: 13/05/2024
Date of sampling: 13/05/2024
Date of analysis: 13/05/2024

Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 100 °C	mm ² /s	ASTM D445	Min. 6.0	8.723	Pass
Viscosity index	-	ASTM D2270	Min. 95	106	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Flash Point, COC	°C	ASTM D92	Min. 200	246	Pass
Pour Point	°C	ASTM D97	Max. -15	<-21	Pass
Color	-	ASTM D1500	RED	RED	Pass
Density at 15 °C	g/cm ³	ASTM D4052	Test & Report	0.8833	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.: 20241966
Date of issue: 18/11/2024

Test sample

Product: AVTOIL M-10G2K SAE 30 CC (GOST 17479.1-85)
Batch number: 24111966
Tank ID: T45.1

Manufacture date: 18/11/2024
Date of sampling: 18/11/2024
Date of analysis: 18/11/2024

Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 100 °C, min.	mm ² /s	ASTM D445	10.5-11.5	11.16	Pass
Viscosity index	-	ASTM D2270	Min. 85	112	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Pour Point	°C	ASTM D97	Max. -15	<-18	Pass
Color, with a dilution of 15:85, units of the CNT	-	ГОСТ 20284	Max. 4.0	0.8	Pass
Density at 15 °C	g/cm ³	ASTM D4052	Test&Report	0.8843	Pass

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.

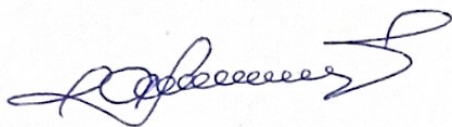
This product meets the specification set out in its product data sheet (PDS) and has been manufactured in a facility fully complying with the requirements of Integrated Management System standards.

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**Allahverdiyeva Aytan
Head of Laboratory**



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

Certificate No.: 2025396-1
Date of issue: 06/03/2025

Test sample

Product: AVTOIL M-10G2
Batch number: 2503396-1
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 ² /s	GOST 33	10.5-11.5	10.60
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. 5.0	0.9
Density - at 15 °C - at 20 °C	g/cm ³	GOST 3900	Test & Report Max. 0.905	0.8861 0.8817

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.

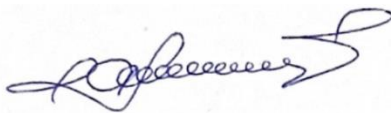
This product meets the specification set out in its product data sheet (PDS) and has been manufactured in a facility fully complying with the requirements of Integrated Management System standards.

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Approved by



Aytan Allahverdiyeva
Head of Laboratory





Mobil Pegasus™ 705

Mobil Industrial , Russia
Масло для газовых двигателей

Описание продукта

Mobil Pegasus 705 - высококачественное масло для газовых двигателей класса вязкости SAE 40 с высокими эксплуатационными характеристиками, разработанное для применения в широкой линейке двигателей, работающих на природном газе. Рекомендуется для высокооборотных четырехтактных двигателей, чувствительных к износу клапанов и седла и работающих на стехиометрических и обедненных смесях. Это масло также рекомендует для смазывания газовых компрессоров и разнообразных двигателей, требующих применения малозольного масла. Масло Mobil Pegasus 705 создано на основе тщательно отобранных высококачественных минеральных базовых масел и современных присадок, разработанных для обеспечения защиты деталей двигателей и компрессоров и снижения уровня отложений в камере сгорания. Это масло обладает химической стабильностью и стойкостью к окислению и нитрованию, в результате чего достигается более продолжительный срок службы масла и снижаются затраты на замену фильтров. Эти улучшенные эксплуатационные параметры в сочетании с эффективными моющими и диспергирующими свойствами сводят к минимуму образование зольных отложений и нагара, которые могут ухудшать эксплуатационные характеристики двигателя и вызывать детонацию.

Масло Mobil Pegasus 705 обладает эффективными антикоррозионными свойствами, предотвращающими коррозионный износ цилиндров, клапанов, подшипников, благодаря чему достигается более продолжительный срок службы двигателя. Высокий уровень противоизносных характеристик этого масла способствует снижению износа колец, гильз цилиндров и подшипников. Масло Mobil Pegasus 705 также обеспечивает надежную защиту седел и клапанов, снижает износ и образование отложений в ответственных зонах направляющих втулок клапанов работающих под высокой нагрузкой четырехтактных двигателей с турбонаддувом.

Особенности и преимущества

Масло Mobil Pegasus 705 для газовых двигателей обеспечивает более высокую степень чистоты, замедляет износ и улучшает эксплуатационные характеристики двигателей. Свойства этого продукта особенно хорошо проявляются в увеличении срока службы клапанов и улучшении эксплуатационных характеристик высокоскоростных четырехтактных двигателей, в том числе новейших конструкций, эксплуатируемых на обедненных смесях при высоких нагрузках. В результате снижаются эксплуатационные затраты и повышается производительность. Химическая и окислительная стабильность приводит к увеличению интервалов замены масла и снижению затрат на фильтры. Применение Mobil Pegasus 705 снижает образование зольных отложений и нагара в камерах сгорания, что способствует уменьшению затрат на техническое обслуживание при одновременном улучшении эксплуатационных характеристик двигателей и сокращении затрат на топливо.

Особенности	Преимущества и потенциальные выгоды
Эффективные противоизносные и противозадирные свойства.	Снижение износа деталей двигателя. Уменьшение образования задиров на гильзах цилиндров газовых двигателей, работающих под высокой нагрузкой. Надежная защита при обкатке двигателя.
Высокоэффективная окислительная и химическая стабильность.	Повышение чистоты двигателя. Увеличенный интервал замены масла. Сокращение затрат на замену фильтров. Высокая стойкость к окислению и нитрованию. Уменьшение образования кокса и отложений во внутренней полости поршня.
Малозольный состав масла.	Снижение износа седел, фасок и направляющих втулок клапанов. Предотвращение образования золы и сажи в камерах сгорания и улучшение работы системы зажигания. Улучшенные эксплуатационные характеристики двигателя. Снижение затрат на топливо.
Устойчивость к коррозии.	Снижение износа направляющих клапанов в четырехтактных газовых двигателях. Защита подшипников и внутренних узлов.

Особенности	Преимущества и потенциальные выгоды
Эффективные моющие и диспергирующие свойства.	Повышение чистоты двигателя. Меньше отложений в верхней части цилиндров. Увеличение срока службы фильтров. Сокращение затрат на техническое обслуживание.

Применение

- Высокооборотные газовые двигатели, работающие на обедненных или стехиометрических смесях, чувствительные к износу седел клапанов.
- Картеры и рабочие цилиндры двух- и четырехтактных газовых двигателей с искровым зажиганием.
- Рекомендовано для применения в тех областях, где требуется масло малозольного состава.
- Цилиндры поршневых компрессоров для перекачки природного газа.
- Двигатели высокой или номинальной мощности, работающие в режиме номинальной мощности или с ее превышением в условиях высокой темпера
- Двигатели, работающие на топливе с низким содержанием сероводорода.

Спецификации и одобрения

Продукция имеет следующие одобрения:
INNIO Jenbacher TI 1000-1108 (Class A fuel gas, Type 9)
INNIO Jenbacher TI 1000-1109 (Class A fuel gas, Type 2, 3, 4 & 6)
INNIO Jenbacher TI 1000-1109 (Class B fuel gas, Type 4 & 6)
MAN M 3271-2
MTU Gas Engines S4000 L32, L33 using natural gas
MWM TR 0199-99-2105, Lube Oils for Gas Engines: TCG2016 < 48.5 kWe / cyl. TCG2020 < 95.0 kWe / cyl. TCG2032 < 260.0 kWe / cy
Perkins Gas Engine Oil - Natural Gas
Wartsila 220SG
Wartsila 28SG
Wartsila 32DF
Wartsila 34SG
Wartsila W12V150SG, W12V175SG, W16V175SG
Wartsila W25SG
Rolls-Royce Solutions Augsburg (former MTU Onsite Energy) Gas Engines Series 400 - all engines with natural gas and propane gas
MTU Gas Engines S4000 L61, L62, L63 using natural gas
INNIO Jenbacher TI 1000-1109 (Class C fuel gas, Type 4A, 4B & 4C)

Продукция соответствует следующим требованиям или превосходит их:
Caterpillar

Свойства и характеристики

Свойство	
Класс	SAE 40
Температура застывания, °C, ASTM D97	-18
Зольность сульфатная, % масс., ASTM D874	0,5
Кинематическая вязкость при 100°C, мм2/с, ASTM D445	13.2
Температура вспышки в открытом тигле Кливленда, °C, ASTM D 92	252
Плотность при 15 C, кг/л, РАСЧЕТНАЯ	0,887
Щелочное число - ксилол/уксусная кислота, мг KOH/г, ASTM D2896	5,7
Кинематическая вязкость при 40°C, мм2/с, ASTM D445	126
Индекс вязкости, ASTM D2270 (*)	98

(*) применение иных одобренных ASTM растворителей может давать другие результаты.

Охрана труда и техника безопасности

Рекомендации по охране труда и технике безопасности для данного продукта приведены в «Бюллетене данных по безопасности», который размеще адресу <http://www.msds.exxonmobil.com/psims/psims.aspx>

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01-2022

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