

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



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

Date of sampling: 02/07/2024 Date of analysis: 02/07/2024

Manufacture date: 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	mm²/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	Max15	<-18	Pass
Color	-	ASTM D1500	Max. 3.0	1.0	Pass
Density at 15 °C	g/cm <sup>3</sup>	ASTM D4052	Test&Report	0.8770	Pass

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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#### 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.
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#### **Authorised singnatory**

Allahverdiyeva Aytan Head of Laboratory

Josepheres

Tsgandarli Nazrin Lead Chemical Engineer





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Company: ALCO LLC

3, Vali Mammadov st., Sabail dist. AZ1095, Baku, Azerbaijan Certificate No.: 2025344 Date of issue: 06/03/2025

#### **Test sample**

Product: AVTOIL M-8V M 20W20

Batch number: 2502344

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	mm²/s	GOST 33	7.5-8.5	8.446
Viscosity index	-	GOST 25371	Min. 93	102
Water content	%	GOST 2477	Max. 0.05	None
Pour Point	°C	GOST 20287	Max25	-25
Color, with a dilution of 15:85, units of the CNT	-	GOST 20284	Max. 3.5	0.8
Density -at 15 °C -at 20 °C	g/cm <sup>3</sup>	GOST 3900	Test&Report	0.8791 0.8748

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#### Approved by

Aytan Allahverdiyeva **Head of Laboratory** 







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### **Brake fluid**

DOT-4

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#### 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product identifier		
Mixture name	Brake fluid DOT - 4	
Trade name	Brake fluid DOT - 4	
Identified uses	Brake fluid for all kind of trucks and passenger cars.	
Uses advised against	Any other use.	
	Cherkasy Autochemistry Plant LLC	
	18003, Ukraine, Cherkasy	
M	Vyacheslava Chornovola, 118, PO Box 729	
Manufacturer	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 mixtur	·e			
Classification according to Regulation (EC) No 1272/200	08 (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 bothersom effect;			
Eyes	Slight irritation.			
Skin	Slight irritation.			
Swallowing	Dose-dependent absorptive effects. Nausea, stomachache, lethargy, drowsiness.			
2.2 Label elements				



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Product identifier	1,2-Ethanediol (Index # 603-027-00-1); 2,2'-oxydiethanol (Index # 603-140-00-6).
Hazard pictograms	
Signal word	Warning
Hazard statements	H302: Harmful if swallowed. H373: May cause damage to organs through prolonged or repeated exposure
Precautionary statements	P260: Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash with plenty of water and soap thoroughly after handling. P270 Do not eat, drink or smoke when using this product P301+P312+P330: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. rinse mouth. P314: Get medical advice/attention if you feel unwell. P501 Dispose of contents/ container in accordance with local regulations
Additional information	None

#### 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-	111-46-6	≤90	Acute Toxicity, Cat. 4, Ingestion; H302	603- 140- 00-6-	01- 2119457857- 21



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				STOT – rep. exp. Cat. 2; H373		
1,2-Ethanediol	203-473- 3	107-21-1	>10	Acute Toxicity, Cat. 4, Ingestion; H302 Stot.rep., Cat. 2; H373	603- 027- 00-1	01- 2119456816- 28
2-aminoethanol	205-483-	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 measure	S
	Inhalation of product is not expected.
In case of inhalation:	Keep patient calm, remove to fresh air, seek medical
	attention.
	Wash affected eyes for at least 15 minutes under
In case of eye contact:	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
In case of ingestion:	water, seek medical attention.
4.2 Most important symptoms and	effects, both acute and delayed
	Headache, dizziness, weakness. Due to the low vapor
In case of inhelation	pressure under normal conditions, exposure to vapors is
In case of inhalation	only toxicologically relevant when handling heated
	mixture.
In case of eye contact	slightly irritating effect on mucous membranes.



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In case of skin contact	Slight irritation, redness, edema.		
	Headache, dizziness, weakness, vomiting, nausea,		
In case of ingestion	diarrhea, in case of severe poisoning: fainting,		
	convulsions, damage to the kidneys.		
	The risk of life-threatening poisoning should generally		
Information to physician and	only exist after ingestion or very massive inhalation of		
Information to physician and	aerosols. Treatment: Treat according to symptoms		
first aider.	(decontamination, vital functions), no known specific		
	antidote		
	Universal medical kit with a set of drugs (in		
First aid arsenal	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,
buttuble extinguishing media	carbon dioxide
Unsuitable extinguishing media	Do not use direct water jets as water destroys the foam.
5.2 Special hazards arising from the	e substance or mixture
	Incomplete combustion is likely to give rise to a
Hazardans combustion products	complex mixture of airborne solid and liquid
Hazardous combustion products	particulates and gases, including carbon monoxide and
	carbon dioxide and minor amounts of nitrous oxides.
5.3 Advice for firefighters	
Combustible product, ignites from op	en 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	Avoid contact with skin and eyes. Use personal		
personnel	protective clothing. Stop or contain leak at the source if		
	safe to do so. Avoid direct contact with released		



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	material. Stay upwind. Keep non-involved personnel		
	away from the area of spillage. Alert emergency		
	personnel.		
	Eliminate all ignition sources if safe to do so (e.g.		
	electricity, sparks, fires, flares).		
(12 Fan amangana)	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.		
6.1.2. For emergency	A half or full-face respirator with combined		
responders	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				
	Use in well ventilated areas.			
General precautions for safe	Avoid contact with eyes.			
handling	Avoid prolonged contact with skin.			
	Avoid breathing fumes or vapors.			
Fine preventions	No smoking at working area.			
Fire preventions	Take precautionary measures against static discharges.			



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	Take precautionary measures against static electricity		
	such as ensuring all equipment is electrically grounded.		
	Electrical devices must meet the specified temperature		
	class.		
	Temperature class: T2 (Auto ignition temperature >300 °C).		
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.		
<b>Environmental precautions</b>	Do not allow product to enter into surface water or drains.		
7.2 Conditions for safe storage, inc	luding 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	Provide general ventilation. Protect from atmospheric		
and vessels	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 exp	Occupational exposure limits						
Limit value type (country of	Substance name	CAS-No.	Monitoring	Occupa exposur val	re limit		
origin)	Substance name	CAB-110.	procedures	Long term	Short term		
				mg/m³	mg/m³		



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EU (OEL)	2-aminoethanol	141-43-5	Area Air Sampling	2,5	7,6
EU ( OEL)	1,2-Ethanediol	107-21-1	-	LTEL TWA =52	STEL =104
Germany ( DFG)	2,2'-oxydiethanol	111-46-6	-	LTEL	STEL
DNEL/DMEL values:				TWA=44	=176
Substance name	Worker	Consumer	Exposure route	Exposure frequenc y	Remark
	DNEL = 1 mg/m <sup>3</sup>	DNEL = 0.18 mg/m <sup>3</sup>	inhalation	Long term	-
2-aminoethanol	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	-
	DNEL=35 mg/m³	7 mg/m³	inhalation	Long- term	-
1,2-Ethanediol	106 mg/kg bw/day	53 mg/kg bw/day	dermal	Long- term	-
	No hazard identified	No hazard identified	Eye	-	local effects
	43 mg/kg bw/day	21 mg/kg bw/day	dermal	Long term	Systemic effect
2,2'-oxydiethanol	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	Assessme nt factor	Remark
	aqua (freshwater)	PNEC = 0.07 mg/L		10	-
2 anning a state are all	aqua (marine water)	PNEC = 0.007 mg/L		100	-
2-aminoethanol	sediment (freshwater)	PNEC = 0.357	mg/kg sediment dw	-	-
sediment (marine water)		PNEC = 0.036 mg/kg sediment dw		-	-
1,2-Ethanediol	aqua (freshwater)	PNEC 10 mg/L			-



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	PNEC aqua (marine water)	PNEC 1 mg/L	-	
	PNEC aqua (intermittent, freshwater)	PNEC 10 mg/L	-	
	freshwater	PNEC 10 mg/L	-	
2,2'-oxydiethanol	aqua (marine water)	PNEC 1 mg/L	-	
2,2 Oxydictilation	Sediment (freshwater) dw	PNEC = 20.9 mg/kg	-	
8.2 Exposure controls				
Occupational exposur	e 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 formed due to accident use respirator. Wear reprotection if ventilation is inadequate. Gas gases/vapors of organic compounds (boiling possible of the compounds) of the compounds of the compound of the compounds of the compound of the compounds		or. Wear respiratory uate. Gas filter for		
Eye/face protection		If potential exists for splashing or tightly fitting safety goggles (e.g. El		
Skin/body protection		Wear working protective gloves (EN 374). Wear regular work clothing.		
8.2.3. Environmental exposure controls				
Measures to prevent	Emissions from wastewaters from work processes should be checked to ensure they comply with the requirements of environmental protection legislation		omply with the	

#### 9. PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties			
Physical state Oily liquid			
Colour	Light yellow		
Odour	Almost odorless		



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Molting point/fragging point			
Melting point/freezing point (°C)	- 35		
Initial boiling point/range	230		
(°C)	244 (2,2'-oxydiethanol) , 197°C (1,2-ethandiol)		
Til 1 - 2124	nonflammable (GHS classification criteria for flammable		
Flammability	liquids: no category (nonflammable) Flash point >93 °C)		
	Non explosive		
	2,2'-oxydiethanol:		
	Lower explosion limit: 1.7% by volume 75 g/m <sup>3</sup>		
Lower and upper explosion	Upper explosion limit:37% by volume 1635 g/m <sup>3</sup>		
limit	1,2- ethandiol :		
	Lower explosion limit: 3.2% by volume 80 g/m <sup>3</sup>		
	Upper explosion limit: 43 - 51%(by vol. 1090 1326 g/m <sup>3</sup>		
	Lower explosion point: 109°C		
	120°C		
	138 °C (2,2-oxydiethanol)		
Flash point (°C)	111°C (1,2- ethandiol)		
	91°C – closed cup (2-aminoethanol)		
	No data available for mixture		
Auto-ignition temperature	372 °C (2,2-oxydiethanol)		
(°C)	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-	Does not apply to mixtures.		
Octanol/Water (log Po/w)	11 7		
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	No data available for mixture.		
Vapour pressure (kPa)	0.008hPa(2,2-oxydiethanol)		
Topical product (inclusion	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	None		
classes			
Classes			



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9.2.2. Other safety	None
characteristics	None

#### 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.		
	Incomplete combustion is likely to give rise to a complex		
10.6 Hazardous	mixture of airborne solid and liquid particulates and gases,		
decomposition products	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 i Data on substances is presented below.			
Substance name	Exposure route	Value Exposure time period Species (a equiv			
2.2 avadiathanal	oral	LD50 =19600 mg/kg bw	-	rat	-
2,2-oxydiethanol	dermal	LD50 = 13300 mg/kg bw	-	Rabbits	-
1,2-ethandiol	oral	LD50 = 4700mg/kg	-	rat	-



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	dermal	LD50 = 10600 mg/kg	-	Rabbits	-	
	oral	LD50 = 1089 mg/kg	single dose	rat	OECD Guideline 401	
2-aminoethanol	inhalation	LC50 = 1300 mg/m <sup>3</sup>	6 hours	rat	national standard method with acceptable restrictions	
	dermal	LD50 = 2504 mg/kg	24 hours	rabbit	OECD Guideline 402	
Skin corrosion/irritati	ion	The mixture is not of irritating. Data on s				
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		not classified as Serious e ation of the classified sul	-			
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				g/kg bw/day	
Reproductive toxicity	The mixture is not classified as possessing reproductive toxicity as no respectively classified substances are present in it.					



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Data on substances presented below.							
Substance name	Relevance	Result		Species	Method (as is, equivalent or similar)		
2-aminoethanol	Yes	NOAEL = 1 000 mg/kg by	v/day	rat	OECD Guideline 415		
2,2'-oxydiethanol		NOAEL (effects on ferti subacute, 3060mg/kg bw		oral, mouse	-		
specific target organ toxicity — single exposure		<u>-</u>	s not classified for specific target organ toxicity — single o respectively classified substances are present in it.				
STOT-repeated exposure	(Affected org	s classified as STOT-1 ans: kidney Route of e classified substances ar ances is presented bel	exposure: ( re present i	Oral;)	Category 2, oral		
Substance name	Exposure route	Result	Species		Method as is, equivalent or similar)		
2,2-oxydiethanol	oral	NOAEL = 300 mg/kg bw/day(98 days)			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 imilar to OECD Guideline 452		
Aspiration hazard		is not classified for asp stances are present in		cicity as n	o respectively		
Adverse health effect	ts and sympto	ms associated with ex	kposure				
In case of inhalation  due to high concentrations of vapors/aerosol, slig irritation in the upper respiratory tract or botherse effect; in extreme cases breathing difficulties and absorptive effects			bothersome				
In case of eye contac	contact no or little irritation						
no significant irritation; systemic effects must be expected if there is extensive contact with damage skin.							
In case of ingestion hardly any irritation, dose-dependent absorptive			sorptive effects.				



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11.2 Information on other hazards				
<b>Endocrine disrupting properties</b>	Any of the ingredient of mixture has not been identified as having endocrine disrupting properties.			

#### 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
emylenegrycor	Short-term toxicity to fish	LC50 =41000 mg/l	48 h	Crustaceans	-
	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
2-aminoethanol	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	Pseudokirchne- riella 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).



#### **Brake fluid**

**DOT-4** 

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1,2-ethandiol: After 10 days > 90 % degradation was determined. (OECD 301A)

2,2-oxydiethanol: meet the criteria in a carbon dioxide evolution test according to OECD 301B. % Degradation of test substance: 90 - 100% after 28d

#### 12.3 Bioaccumulative potential

No data available for mixture.

#### 12.4 Mobility in soil

Study scientifically unjustified (substance is readily biodegradable)

#### 12.5 Results of PBT and vPvB assessment

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

#### 12.6 Other adverse effects:

None

#### 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods	
	Waste disposal should be in strict correspondence with
Appropriate disposal / Product	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
	Contaminated stainless steel empty containers should
Appropriate disposal /Packaging	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	Environmental hozards Not considered as marine pollutant according to IMDG			
14.5. Environmental nazarus	Code.			
14.6. Special precautions for user None				
<b>14.7 Maritime transport in bulk</b> This product is not transported in bulk and is out of the				
according to IMO instruments	scope of Annex II of MARPOL 73/78.			

#### 15. REGULATORY INFORMATION



#### Brake fluid

**DOT-4** 

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

None

#### 15.2 Chemical Safety Assessment

Chemical safety assessment has not been carried for the mixture.

#### 16. OTHER INFORMATION

#### Revision

SDS has been issued for the first time.

#### **Abbreviations**

OEL – occupational exposure limit

VLEP – valeurs limites d'exposition professionnelle- occupational exposure limit values

VLE - valeurs limites d'exposition- occupational exposure limit values

MAK - maximum workplace concentrations

MAC - maximum workplace concentrations

WEL- Workplace Exposure Limits

AK - Permissible average concentration

DNEL - derived no-effect level

PNEC - predicted no effect concentration

LD50 – lethal dose

EC50 – half maximal effective concentration

EC10 - half maximal effective concentration

NOEL - no observed effect level

NOEC - no observed effect concentration

NOAEL – no observed adverse effect level

PBT or vPvB - persistent, bioaccumulative and toxic or very persistent very bioaccumulative

STOT SE – Specific target organ toxicity – single exposure

STOT RE - Specific target organ toxicity – repeated exposure

AF – Assessment factor

#### Sources for data

Suppliers' SDS for 1.2-ethandiol

Suppliers' SDS for 2.2'- oxydiethanol

ECHA database on registered substances

GESTIS database on international limit values

Specification TU U 20.5-37439067-006:2019

#### **Classification method**

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

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

H302: Harmful if swallowed.



#### **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.

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



YUKO-є зареєстрованою торговою маркою ТОВ "СП ЮКОЙЛ"

Випробувальна лабораторія ТОВ «СП ЮКОЙЛ» атестована на проведення вимірювань показників якості нафтопродуктів, технічних рідин та мастильних матеріапів. Свідоцтво 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 №18068.01.01.1 Олива моторна YUKO SYNTHETIC 5W-40

Виробник: ТОВ «СП ЮКОЙЛ» за ТУ У 19.2-31852954-029:2020 Розфасовано: ТОВ «СП ЮКОЙЛ» за ТУ У 23.2-31852954-027:2006

Клас в'язкості: SAE 5W-40

Клас експлуатаційних властивостей: API SN/CF, ACEA A3/B4

Дата виготовлення: Квітень 2025р.

Тара: каністра 4л жерсть; об'єм партії 500 шт.

Номер партії: 18068.30.04.25.01.



Ф.5 СТП014

Вимоги НД	Фактично	Ф.5 СТП014
910	851,1	ГОСТ 3900 або ASTM D1298
12,5 - 16,3	15,29	ДСТУ ГОСТ 33 або ASTM D445
140	169	ДСТУ ГОСТ 25371 або ASTM D2270
205	207	ДСТУ ГОСТ 4333 або ASTM D92
- 35	- 43	ГОСТ 20287 або ASTM D97
0,015	0,012	ГОСТ 6370
Сліди	Сліди	ГОСТ 2477 або ASTM D95
4,5	0,5	ГОСТ 20284 з доповненням 6.3 цих ТУ або ASTM D1500
9,0	9,63	ДСТУ 5094 або ГОСТ 11362 або ASTM D4739 або ASTM D2896
		FOCT 13538 aбo ASTM D6481 aбo ASTM D6443 aбo ASTM D4927
0,30	0,369	
0,11	0,123	
1,5	1,44	ДСТУ ГОСТ 12417 або ASTM D874
		ДСТУ 8349 або ASTM D5293
6 600	6 404	
	12,5 - 16,3  140  205  - 35  0,015  Сліди  4,5  9,0  0,30  0,11  1,5	910 851,1 12,5 - 16,3 15,29  140 169  205 207  - 35 - 43 0,015 0,012 Сліди Сліди 4,5 0,5  9,0 9,63  0,30 0,369 0,11 0,123 1,5 1,44

Паспорт якості дійсний тільки за наявності печатки.

Висновок: якість продукції відповідає вимогам нормативної документації

Гарантійний термін зберігання - 5 років

ТЕХНІЧНОГО КО

ДЛЯ ПАСПОРТІВ ЯКОСТІ ТОВ «СП ЮКОЙЛ Начальник ВТК

Юлія ЄВТУШЕНКО



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



Company: ALCO LLC

3, Vali Mammadov st., Sabail dist. AZ1095, Baku, Azerbaijan **Certificate No.:** 20241054 **Date of issue:** 05/07/2024

#### **Test sample**

Product: AVTOIL TAP 15B 90 GL-3
Batch number: 24071054

**Tank ID**: T45.2

Manufacture date: 04/07/2024 Date of sampling: 04/07/2024

Date of analysis: 04/07/2024

#### **Test result**

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 100 °C	mm²/s	ASTM D445	14.0-16.0	15.21	Pass
Viscosity index	-	ASTM D2270	Min. 90	100	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Flash Point, COC	°C	ASTM D92	Min. 185	240	Pass
Pour Point	°C	ASTM D97	Max20	<-23	Pass
Color.	-	ASTM D1500	Test & Report	3.9	Pass
Density at 15 °C	g/cm <sup>3</sup>	ASTM D4052	Test & Report	0.8877	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.



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



#### 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



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



Company: ALCO LLC

3, Vali Mammadov st., Sabail dist. AZ1095, Baku, Azerbaijan

**Certificate No.:** 20241807 **Date of issue:** 23/10/2024

#### **Test sample**

Product: AVTOIL TAD-17

Batch number: 24101807

Tank ID: T41.1

Manufacture date: 23/10/2024

Date of sampling: 23/10/2024

Date of analysis: 23/10/2024

#### **Test result**

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 100 °C	mm²/s	ASTM D445	Min. 17.50	18.30	Pass
Viscosity Index	-	ASTM D1500	Min. 100	122	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Pour Point	°C	ASTM D97	Max25	-27	Pass
Color	-	ASTM D1500	Test & Report	4.4	Pass
Density at 15°C	g/cm <sup>3</sup>	ASTM D4052	Test & Report	0.8839	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.



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



#### Notes & Instructions:

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  with the latest published versions. Minor changes may be made where they have no material impact on test
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- This certificate is only valid in its entirety.
- This certificate shall not be reproduced except in full, without the written approval of the laboratory.

Approved by

Allahverdiyeva Aytan Head of Laboratory



# CERTIFICAT DE CONFORMITATE



Nr. de înregistrare 11 A008170-25

Data emiterii

14 martie 2025

Valabil pînă

14 martie 2027

ORGANISMUL DE CERTIFICARE produse din cadrul SC "Inspecție-Certificare-Calitate" S.R.L. MD 2032, mun. Chișinău, str. Sarmizegetusa, 92, tel./fax 022 50-70-75, www.certificare.md

PRIN PREZENTUL DO CUMENT SE CONFIRMĂ FAPTUL, CĂ PRODUSELE IDENTIFICATE ASTFEL: DENUMIREA / DESCRIEREA

Codul NCM

Produse chimice pentru autoturisme, marca comercială "DA'AUTO'CAR": soluție apoasă de uree "AD-Blue" pentru motoare Diesel. Fabricare în serie conform SF 41279445-0012021

3102

#### SÎNT CONFORME CU CERINȚELE OBLIGATORII STABILITE ÎN:

SM GOST R 51696:2003 p.3.2.1 (tab.1, ind. 1); SM STB 1044:2011 p.4, p.5, p.7; HG RM nr. 996 din 20.08.2003, anexa 2 "Normele privind etichetarea produselor chimice de menaj"

#### PRODUCĂTOR

"AMID-AUTO" SRL, şos. Munceşti, 364, mun. Chişinău, Republica Moldova

Codul țării

MD

#### SOLICITANT

"AMID-AUTO" SRL, str.Independentei 42, ap. 20, mun. Chişinău, Republica Moldova

Codul IDNO

1018600036225

#### CERTIFICATUL ESTE ELIBERAT ÎN BAZA

Raportului de încercări nr. 6 din 07.03.2025, eliberat de LÎ al "ASCHIM CI" SRL, mun. Chişinău, or. Durleşti, str. T.Vladimirescu, 70; Raportului de evaluare a procesului de producție nr. 9581-25 din 05.03.2025; Raportului de identificare a produselor nr. 9581-25 din 05.03.2025; Raportului sumar asupra rezultatelor certificării produselor nr. 9581-25 din 12.03.2025, eliberate OC "ICC".

#### INFORMATIE SUPLIMENTARĂ:

Schema certificării produselor Nr.3. Evaluarea periodică se va efectua o dată pe an de OC "ICC" conform contractului de evaluare periodică a produselor certificate Nr.25.22.9581-EPPC din 14.03.2025. Contract de efectuare a încercărilor periodice Nr. 14-2025 din 01.03.2025 cu LÎ "ASCHIM CI" SRL. Certificatul este valabil doar în cazul asigurării cu informația în limba de stat a fiecărei unități de produs, conform legislației în vigoare.

SELCTERE SELECTERE SELECTERE SELECTERE SELECTERE SELECTERE SELECTERE SELECTERE SELECTERE SELECTER SELE

ADJ, CONDUCĂTORUL ORGANISMULUI DE CERTIFICARE Oh

Neaga O.

Seria V Nr. 008170

ТОВ «СП ЮКОИЛ». 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 €ДРПОУ 31852954



Випробувальна лабораторія ТОВ «СП ЮКОЙЛ» атестована на проведення

## Паспорт якості фасованої продукції №10118.01.01.

## Мастило YUKO Солідол Жировий

Виробник ТОВ «СП ЮКОЙЛ»

Розфасовано ТОВ «СП ЮКОЙЛ» за ТУ У 23.2-31852954-027:2006

Клас NLGI **NLGI 2/3** 

Клас експлуатаційних властивостей: K2/3C-25, ISO-L-XBAEA2/3

Дата виготовлення: Березень 2025р.

Тара: відро 5л ПЕ

Номер партії 10118.07.03.25.01.

Назва показника	Вимоги НД	Фактично	Mozo z zwen 5
Зовнішній вигляд	Однорідне мастило від світло-жовтого до темно- коричневого кольору	Фактично Однорідне мастило коричневого кольору	Метод випробувань 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 <u>деформації 10 с-1, Па·с, не більше</u>	250	242	ГОСТ 7163
Пенетрація при 25°C з перемішуванням, мм·10-1	230-290	265	ГОСТ 5346, метод В
Межа міцності на зсув при 50°С, Па, не менше	196	440	ГОСТ 7143
ольше	0,2	0,062	FOCT 6707
Масова частка вільних органічних кислот	Відсутність	Відсутність	FOOT C707
Масова частка механічних домішок, не розчинних у соляній кислоті, %, не більше	Відсутність	Відсутність	ГОСТ 6707 ГОСТ 6479
<b>Масова частка води, %, не більше</b>	2,5	0,1	FOOT 0477
		11,0	ΓΟCT 2477 ΓΟCT 5211

сті дійсний тільки за наявності печатки.

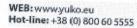
Висновок: якість продукції відповідає вимога». ГОСТ 1033-79 і TV V 23.2-31852954-027:2006

Гарантійний термін зберігання - 5 років

М. П.

Начальник

Юлія ЄВТУШЕНКО



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