

# **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.: 2023081137 Date of issue: 01/08/2023

Test sample

Product: MAXIMUM SUPER 5W30 SN/CF

Material ID: M0000145

Date of sampling: 01/08/2023

Manufacture date: 01/08/2023 Batch number: 23081137

Tank ID: T41.1

# Test result

Date of analysis: 01/08/2023

Parameters	Unit	Unit Test result Lin		Test method	Conclusion	
Appearance		Bright & Clear	Bright & Clear	Visual	Pass	
Kinematic viscosity at 100 °C,	mm²/s	10.49	9.3-12.5	ASTM D445	Pass	
Viscosity index	-	150	Min. 140	ASTM D2270	Pass	
Water content	%	None	Max. 0.05	ASTM D95	Pass	
Flash Point, COC	°C	232	Min. 210	ASTM D92	Pass	
Pour Point	°C	-35	Max35	ASTM D97	Pass	
Color	-	1.3	Test & Report	ASTM D1500	Pass	
Density at 20 °C	g/cm <sup>3</sup>	0.8626	Test & Report	ASTM D4052	Pass	

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



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

Matilda Yusifova Technologist



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From: ALCO LLC

3, Vali Mammadov st., Sabail dist.

AZ1095, Baku, Azerbaijan

Certificate No.: 2023081315 Date of issue: 28/08/2023

#### Test sample

Product: MAXIMUM INDUSTRIAL HYDRAULIC I-20A

Material ID: M000197

Date of sampling: 28/08/2023

Manufacture date: 28/08/2023 Batch number: 23081315

Tank ID: RT-3

#### Test result

Date of analysis: 28/08/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion
Appearance	-	Bright & Clear	Bright & Clear	Visual	Pass
Kinematic viscosity at 100 °C	mm²/s	5.11	4.5-5.5	ASTM D445	Pass
Kinematic viscosity at 40 °C	mm²/s	29.78	Test & Report	ASTM D445	Pass
Viscosity index	-	99	Min. 90	ASTM D2270	Pass
Water content	%	None	Max. 0.05	ASTM D95	Pass
Flash Point, COC	°C	225	Min. 190	ASTM D92	Pass
Pour Point	°C	-13	Max10	ASTM D97	Pass
Color	-	0.3	Max. 1.0	ASTM D1500	Pass
Density at 20 °C	g/cm <sup>3</sup>	0.8670	Test & Report	ASTM D4052	Pass

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



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#### CERTIFICATE OF ANALYSIS

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

From: ALCO LLC

3. Vali Mammadov st., Sabail dist.

Certificate No.: 2023101601

Date of issue: 12/10/2023

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

#### Test sample

Product: MAXIMUM HYDRO MAX ISO 46 Manufacture date: 12/10/2023

 Material ID: M0000197
 Batch number: 23101601

 Date of sampling: 12/10/2023
 Tank ID: T41.1

#### **Test result**

Date of analysis: 12/10/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion
Appearance	-	Bright & Clear	Bright & Clear	Visual	Pass
Kinematic viscosity at 40 °C	mm²/s	45.22	41.4-50.6	ASTM D445	Pass
Viscosity index	-	100	Min. 90	ASTM D2270	Pass
Water content	%	None	Max. 0.05	ASTM D95	Pass
Flash Point, COC	°C	236	Min. 185	ASTM D92	Pass
Pour Point	°C	-27	Max24	ASTM D97	Pass
Color	-	1.3	Test & Report	ASTM D1500	Pass
Density at 20 °C	g/cm <sup>3</sup>	0.8764	Test & Report	ASTM D4052	Pass

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



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# **CERTIFICATE OF ANALYSIS**

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

From: ALCO LLC Certificate No.: 2023101633

3, Vali Mammadov st., Sabail dist. Date of issue: 02/10/2023 AZ1095, Baku, Azerbaijan

#### Test sample

Product: MAXIMUM LITOL 24

Date of sampling: 02/10/2023

Batch number: 23101633

Tank ID: T42.1

#### Test result

Date of analysis: 02/10/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion	
Appearance	-	Green unisex	Light yellow to brown unisex	Visual	Pass	
Dropping Point	°C	>220	Min. 185	ASTM D2265	Pass	
Penetration at 250 °C	mm <sup>-1</sup>	246	220-250	ASTM D217	Pass	
Colloidal Stability	%	3.9	Max. 12	ASTM D6184	Pass	
Strength limit, at -200C, At -800C	Pa	681 222	500-1000 Min. 200	ΓΟCT 7143	Pass	
Mechanical impurities	%	0.02	Max. 0.05	ΓΟCT 6479	Pass	

Shelf life: 3 years from the date of manufacture of the product if proper storage conditions are followed.



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# 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.: 2023101715 Date of issue: 26/10/2023

Test sample

Product: MAXIMUM TAP-15B SAE 90 GL-3

Material ID: M0000186

Date of sampling: 26/10/2023

Manufacture date: 26/10/2023

Batch number: 23101715

Tank ID: T41.3

**Test result** 

Date of analysis: 26/10/2023

Parameters	Unit	Jnit Test result Limit		Test method	Conclusion	
Appearance		Bright & Clear	Bright & Clear	Visual	Pass	
Kinematic viscosity at 100 °C	mm²/s	15.73	13.5-18.5	ASTM D445	Pass	
Viscosity index	-	92	Min. 90	ASTM D2270	Pass	
Water content	%	None	Max 0.05	ASTM D95	Pass	
Flash Point, COC	°C	246	Min. 185	ASTM D92	Pass	
Pour Point	°C	-20	Max20	ASTM D97	Pass	
Density at 20 °C	g/cm <sup>3</sup>	0.8897	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:



#### Notes & Instructions:

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#### CERTIFICATE OF ANALYSIS

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

From: ALCO LLC

3, Vali Mammadov st., Sabail dist.

Certificate No.: 2023111813

Date of issue: 10/11/2023

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

#### Test sample

Product: MAXIMUM INDUSTRIAL HYDRAULIC I-40A Manufacture date: 10/11/2023

**Material ID**: T0000174 **Batch number**: 23111813

**Date of sampling**: 10/11/2023 **Tank ID**: T41.2

#### Test result

Date of analysis: 10/11/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion
Appearance	-	Bright & Clear	Bright & Clear	Visual	Pass
Kinematic viscosity at 100 °C	mm²/s	66.63	61.0-75.0	ASTM D445	Pass
TAN	mg KOH/g	0.003	Max. 0.05	ASTM D974	Pass
Water content	%	None	Max. 0.05	ASTM D95	Pass
Flash Point, COC	°C	240	Min. 220	ASTM D92	Pass
Pour Point	°C	-24	Max15	ASTM D97	Pass
Color	-	1.8	Max. 3.0	ASTM D1500	Pass
Density at 20 °C	g/cm <sup>3</sup>	0.8815	Max. 0.900	ASTM D4052	Pass

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



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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.: 2023121989 Date of issue: 08/122023

**Test sample** 

Product: MAXIMUM TURBO MAX 10W40 CI-4/SL

Material ID: M0000150 Date of sampling: 08/12/2023 Manufacture date: 08/12/2023 Batch number: 23111842 Tank ID: T41.1

**Test result** 

Date of analysis: 08/12/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion
Appearance	-	Bright & Clear	Bright & Clear	Visual	Pass
Kinematic viscosity at 100 °C	mm²/s	14.49	12.5-16.3	ASTM D445	Pass
Viscosity index	-	145	Min. 125	ASTM D2270	Pass
Water content	%	None	Max. 0.05	ASTM D95	Pass
Flash Point, COC	°C	230	Min. 210	ASTM D92	Pass
Pour Point	°C	-35	Max35	ASTM D97	Pass
Color	-	2.0	Test & Report	ASTM D1500	Pass
Density at 20 °C	g/cm <sup>3</sup>	0.87	Test & Report	ASTM D4052	Pass

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



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From: ALCO LLC

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

**Certificate No.:** 2023111843

Date of issue: 15/11/2023

#### Test sample

Product: MAXIMUM TURBO MAX 15W40 CI-4/SL

Material ID: M0000164

Date of sampling: 15/11/2023

Manufacture date: 15//11/2023 Batch number: 23111843

Tank ID: T41.3

#### Test result

Date of analysis: 15/11/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion
Appearance	-	Bright & Clear	Bright & Clear	Visual	Pass
Kinematic viscosity at 100 °C	mm²/s	14.37	12.5-16.3	ASTM D445	Pass
Viscosity index	-	134	Min. 125	ASTM D2270	Pass
Water content	%	None	Max 0.05	ASTM D95	Pass
Flash Point, COC	°C	230	Min. 210	ASTM D92	Pass
Pour Point	°C	-35	Max35	ASTM D97	Pass
Color	-	2.4	Test & Report	ASTM D1500	Pass
Density at 20 °C	g/cm <sup>3</sup>	0.8790	Test & Report	ASTM D4052	Pass

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



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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.: 20230122011 Date of issue: 07/12/2023

#### Test sample

**Product: MAXIMUM TAD 17** 

(85W90 GL-5)

Material ID: M000269

Date of sampling: 07/12/2023

Manufacture date: 07/12/2023 Batch number: 23122011

Tank ID: T41.2

#### Test result

Date of analysis: 22/08/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion
Appearance	-	Bright & Clear	Bright & Clear	Visual	Pass
Kinematic viscosity at 100 °C	mm²/s	18.68	Min. 17.50	ASTM D445	Pass
Viscosity index	-	95	Min. 95	ASTM D2270	Pass
Water content	%	None	Max. 0.05	ASTM D95	Pass
Flash Point, COC	°C	234	Min. 200	ASTM D92	Pass
Pour Point	°C	-30	Max30	ASTM D97	Pass
Density at 20 °C	g/cm <sup>3</sup>	0.8935	Test & Report	ASTM D4052	Pass

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



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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.: 2023122031

Date of issue: 13/12/2023

Test sample

Product: MAXIMUM M10G2K 30 CC

Material ID: M00056

Date of sampling: 13/12/2023

Manufacture date: 13/12/2023

Batch number: 23122031

Tank ID: T41.1

**Test result** 

Date of analysis: 13/12/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion
Appearance	-	Bright & Clear	Bright & Clear	Visual	Pass
Kinematic viscosity at 100 °C, min.	mm²/s	10.92	10.5-11.5	ASTM D445	Pass
Viscosity index	-	93	Min. 85	ASTM D2270	Pass
Water content	%	None	Max. 0.05	ASTM D95	Pass
Flash Point, COC	°C	254	Min. 210	ASTM D92	Pass
Pour Point	°C	-18	Max15	ASTM D97	Pass
Color, with a dilution of 15:85, units of the CNT	-	0.5	Max. 4.0	ГОСТ 20284	Pass
Density at 20 °C	g/cm <sup>3</sup>	0.8880	Max. 0.905	ASTM D4052	Pass

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



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From: ALCO LLC

3, Vali Mammadov st., Sabail dist. AZ1095, Baku, Azerbaijan Certificate No.: 2023122042 Date of issue: 14/12/2023

**Test sample** 

Product: MAXIMUM M8M 20W20 Date of sampling: 14/12/2023 Manufacture date: 14/12/2023 Batch number: 23122042

Tank ID: T41.4

**Test result** 

Date of analysis: 14/12/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion
Appearance	-	Bright & Clear	Bright & Clear	Visual	Pass
Kinematic viscosity at 100 °C	mm²/s	6.882	5.6-9.3	ASTM D445	Pass
Viscosity index	-	109	Min. 93	ASTM D2270	Pass
Water content	%	None	Max. 0.05	ASTM D95	Pass
Flash Point, COC	°C	222	Min. 210	ASTM D92	Pass
Pour Point	°C ~	-33	Max30	ASTM D97	Pass
Color	-	1.2	Test & Report	ASTM D1500	Pass
Density at 20 °C	g/cm <sup>3</sup>	0.8736	Max. 0.905	ASTM D4052	Pass

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



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Matilda Yusifova Technologist



Email: lab@azlub.com





# ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

Заявитель Общество с ограниченной ответственностью «СТРЭКСТЭН» (ООО «СТРЭКСТЭН»)

Место нахождения: 141201, Россия, область Московская, город Пушкино, шоссе Ярославское, дом 1A, этаж 5, комната 502, Основной государственный регистрационный номер 1037739500369

Телефон: +74959934646 Адрес электронной почты: Standart@Delfinrus.com

в лице генерального директора Ковиной Людмилы Николаевны

заявляет, что Жидкость охлаждающая низкозамерзающая марки -40 (ОЖ -40)

Изготовитель Общество с ограниченной ответственностью «СТРЭКСТЭН» (ООО «СТРЭКСТЭН»)

Место нахождения: 141201, Россия, область Московская, город Пушкино, шоссе Ярославское, дом 1A, этаж 5, комната 502

Адрес места осуществления деятельности по изготовлению продукции: 141201, Россия, Московская область. город Пушкино, шоссе Ярославское, дом 1А

Продукция изготовлена в соответствии с ТУ 2422-179-04001396-2010 «Жидкости охлаждающие

низкозамерзающие. Технические условия»

Код (коды) ТН ВЭД ЕАЭС: 3820 00 000 0

Серийный выпуск

#### соответствует требованиям

ТР ТС 030/2012 "О требованиях к смазочным материалам, маслам и специальным жидкостям"

#### Декларация о соответствии принята на основании

протокола испытаний 971-д от 21.12.2020 Испытательной лаборатории Общества с ограниченной ответственностью "Глобал Ресеч", аттестат аккредитации РОСС RU.0001.21AЛ35; № 524/20 от 15.12.2020 Испытательной лаборатории масел и специальных жидкостей Автономной Некоммерческой Организации «Химическая экспертиза», аттестат аккредитации № RA.RU.21HT47

Схема декларирования соответствия: 1д

#### Дополнительная информация

Условия хранения указаны в нормативном документе, по которому изготовлена продукция. Гарантийный срок хранения — 5 лет с даты изготовления. Обозначения и наименования стандартов, включенных в перечни стандартов, в результате применения которых на добровольной основе обеспечивается соблюдение требований технического регламента Таможенного союза "О требованиях к смазочным материалам, маслам и специальным жидкостям" (ТР ТС 030/2012): ГОСТ 28084-89 "Жидкости охлаждающие низкозамерзающие. Общие технические условия"

Декларация о соответствии действительна с даты регистрации по 10.03.2024 включительно

Ковина Людмила Николаевна (Ф.И.О. заявителя)

Регистрационный номер декларации о соответствии: EAЭC N RU Д-RU.PA01.B.39629/21 Дата регистрации декларации о соответствии: 11.03.2021



INDUSTRIALĂ SI CERTIFICARE" SRL "ТЕХНИЧЕСКИЙ ЦЕНТР ПО ПРОМЫШЛЕННОЙ БЕЗОПАСНОСТИ И СЕРТИФИКАЦИИ" ООО MD 2001, mun. Chişinău, str. Melestiu, nr. 22A, tel. (022) 208151, fax (022) 208166, www.ctsic.md, e-mail: agentia@mdl.net, office@ctsic.md



# RAPORT DE INSPECȚIE

din 26 septembrie 2022 OI IPP-1354-2022

ORGANISMUL DE INSPECȚIE din cadrul SRL "CTSIC", certificat de acreditare OI-009

#### PRODUSUL:

Combustibil pentru motoare cu reacție: JET A-1 (cod NCM MD 2710 1921)

#### PRODUCĂTORUL:

"Lukoil Neftohim Burgas" AD, Burgas, Bulgaria

ICS "LUKOIL-MOLDOVA" SRL, MD-2012, mun. Chisinau, str. Columna, 92, tel. 022 21-38-11

#### DATELE PRIVIND INSPECȚIA:

Inspecția a fost efectuată la punctul de trecere a frontierei vamale: Leușeni.

Data inspecției: 13.09.2022, condițiile de mediu: +11 °C; 14.09.2022, condițiile de mediu: +11 °C; +10 °C. Echipamente utilizate: tijă metrică MŞI-3,5; areometru ANT-1; dispozitiv pentru prelevarea probelor PV-1,0. Documente de referință utilizate în cadrul inspecției:

- Hotărîrea Guvernului RM nr. 476 din 17.04.2002 pentru aprobarea Regulamentului privind modul de transportare a produselor petroliere importate;

- Hotărîrea Guvernului RM nr.1116 din 22.08.2002 despre aprobarea Regulamentului cu privire la depozitarea și comercializarea cu ridicata, prin sistem automatizat, a produselor petroliere identificate;

- GOST 10227-86 "Combustibil pentru motoare cu reacție. Condiții tehnice" (ANULAT);

- SM SR EN ISO 3170:2012 "Produse petroliere lichide. Eşantionare manuală";

- Standarde pentru metode de incercări, indicate in tabel pe verso;

- Procedura "Inspecția produselor petroliere" PL-47.

Lot inspectat - 157,101 tone (cantitatea declarată - 3000 tone, cantitatea rămasă de inspectat, luând în considerație inspecțiile precedente - 2842,899 tone).

Data fabricației produsului și termen de garanție nu sunt indicate în documentele de însoțire.

Produsul este ambalat în autocisterne și livrat conform contractului nr. LKXH F-021/11 din 18.01.2018 cu modificările și anexele ulterioare.

Raportul de inspecție este eliberat în baza: rapoartelor de identificare a produsului și prelevare probelor: nr. 3905 din 13.09.2022; nr. 3906; nr. 3907; nr. 3909; nr. 3910; nr. 3911 din 14.09.2022;

- Raportului de încercări nr. 2954 din 23.09.2022, eliberat de LÎ "CTSIC", certificat de acreditare nr. LÎ-096 (rezultatele încercărilor sunt indicate în tabel pe verso);

- Raportului sumar de evaluare nr. OI IPP-1354 din 26.09.2022.

#### REZULTATELE INSPECTIEI:

Produsul inspectat CORESPUNDE cerințelor obligatorii stabilite în:

GOST 10227-86, p.1.2, tab.1, ind.1, 3, 5-8, 12, 16, 18, 20 și în specificațiile a producătorului conform contractului de livrare nr. LKXH F-021/11 din 18.01.2018 cu modificările și anexele ulterioare.

#### INFORMATIE SUPLIMENTARĂ:

Schema de inspecție: inspecția calitativă a produsului livrat în baza contractului de lungă durată. Tipul inspecției înspecția inițială. Categoria (faza) inspecției: furnizare (import).

Sunt stabilite 19 inspecții periodice. 10.55ANISHSE Sectia inspectia

DE INSPECTProduse petroliere

Valentina JURAVLIOVA

Maria GAINA

OIPP 014143

Inspector



# Tabel: Rezultatele încercărilor de laborator conform Raportului de încercări Nr. 2954 din 23.09.2022

Condiții de mediu în laboratorul de încercări : Temperatura: (22±3) °C Presiunea: (100±2) kPa

Nr.	Denumirea caracteristicii	Indicele DN al metodei de	Valori con	form DN	Valori		
		încercare	RT	TS-1	efective	Echipamente	
1	2	3	4	5	6	7	
1.	Densitate la 20°C, kg/m³, min.	GOST 3900-85, p.1. (anulat)	775	775	801	Set de areometre	
	Distilare: punct initial de distilare, °C, max.		135 - 155	150	178,1		
	10% vol. distilă până la temperatura, °C, max.		175	165	192,1		
2+;	50% vol. distilă până la temperatura, °C, max.	SM EN ISO 3405:2019	225	195	209,7	Anton PAAR ADU 5 N 5639286	
	90% vol. distilă până la temperatura, °C, max.		270	230	235,5	10000	
	98% vol. distilă până la temperatura, °C, max.		280	250	248,5		
3.	Viscozitate cinematică, mm²/s, (c St), la +20 °C, min.	SM EN ISO 3104:2021	1,25		1,925	Stabinger Viscometer TM SVM TM 3001	
4.	Înălțimea flăcării fără fum, mm, min.	SM ISO 3014:2014	25		25,5	Арагаг ЛВП-М N.161	
5.	Indice de neutralizare, mg KOH/100 cm³ combustibil, max.	GOST 5985-79, p.3.3. (anulat)	0,2-0,7	0,7	Lipsă	Metodă chimică	
6.	Cifră de iod, g iod/100g, max.	GOST 2070-82, Met. A	0,5	3,5	Lipsă	Metodă chimică	
7	Punct de inflamabilitate în vas închis, °C, min.	SM EN ISO 2719:2017/A1:2021	28		60,0	Stanhope SETA PM-9 N 1040041	
8.	Punct inițial de cristalizare, °C, max.	SM ISO 3013:2014	-55	-60	-50	Cameră frigorifică tip "LT/RBG-5400/2-M" LINETRONIC TECHNOLOGIES N 15041579	
9.	Gume actuale, mg/100 cm <sup>3</sup> , max.	GOST 8489-85	4	5	Lipsă	Termostat "ПОС-77"	
10.	Încercare pe lamă de cupru (3 ore la 100°C)	SM SR EN ISO 2160:2012	rezis	1-	la	Nr. 1801 STANHOPE SETA N 1036031	
11.	Aciditate minerală și alcalinitate	GOST 6307-75 (anulat)	lipsi	1	Lipsă	Metodă chimică	
12.	Apă și impurități mecanice	GOST 10227-86 p. 4.5. (anulat)	lipsi		Lipsă	Vizual	

<sup>\*</sup> corespunde specificațiilor producătorului, conform contractului de livrare nr.LKXH F-021/11 din 18.01.2018 cu modificările și anexele ulterioare

Şef secția inspecția produse petroliere

ON B

Valentina JURAVLIOVA

Inspector

profeseer

Maria GAINA



Trade name: LUKOIL MS-20

Version: 1 / RO Rev. Date revised: 29.08.2022

Product no.: PF484100 Replaces Version: -/RO Print date: 28.11.2022

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

#### 1.1. Product identifier

**LUKOIL MS-20** 

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

#### Use of the substance/preparation

Aviation oil

#### 1.3. Details of the supplier of the safety data sheet

#### **Address**

LUKOIL LUBRICANTS EAST EUROPE S.R.L.

Strada Mihai Bravu 235

100410 Ploiești

RO

Telephone no. +40 244 504 802 Fax no. +40 244 504 801

E-mail address of

technical.support.llee@eu.lukoil.com

person responsible

for this SDS

# 1.4. Emergency telephone number

INSPB: L-V, entry 8.00-15.00 (conf. Art 5 / HG 398/2010) +40213183606

# **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

This product is not classified hazardous in accordance with Regulation (EC) No 1272/2008.

#### 2.2. Label elements

## Labelling according to regulation (EC) No 1272/2008

#### **Supplemental information**

EUH210 Safety data sheet available on request.

#### 2.3. Other hazards

No special hazards have to be mentioned.

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does not have endocrine disrupting properties with respect to non-target organisms.

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### **Further ingredients**

Residual oils (petroleum), hydrotreated; Baseoil - unspecified

CAS No. 64742-57-0 EINECS no. 265-160-8

Registration no. 01-2119489287-22

Index no. 649-470-00-4

Concentration >= 95 %

[3]

Classification (Regulation (EC) No. 1272/2008)



Trade name: LUKOIL MS-20

Version: 1 / RO Rev. Date revised: 29.08.2022

Product no.: PF484100 Replaces Version: -/RO Print date: 28.11.2022

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note H, L

Note

[3] Substance with occupational exposure limits

Other information

DMSO<3% (IP 346)

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

In case of persistent symptoms consult doctor.

#### After inhalation

Ensure supply of fresh air. In the event of symptoms take medical treatment.

#### After skin contact

In case of contact with skin wash off with warm water. Consult a doctor if skin irritation persists.

#### After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). In case of irritation consult an oculist.

#### After ingestion

If individual is drowsy or unconscious place in recovery position (on left side, with head down). Call in a physician immediately and show him the Safety Data Sheet. Do not induce vomiting.

#### Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

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

Until now no symptoms known so far.

#### 4.3. Indication of any immediate medical attention and special treatment needed

#### Hints for the physician / treatment

Treat symptomatically

#### Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

Foam, Dry powder, Carbon dioxide, Water spray jet

#### Non suitable extinguishing media

Full water jet

#### 5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible.

#### 5.3. Advice for firefighters



Trade name: LUKOIL MS-20

Version: 1/RO Rev. Date revised: 29.08.2022

Product no.: PF484100 Replaces Version: - / RO Print date: 28.11.2022

#### Special protective equipment for fire-fighting

In case of combustion use a suitable breathing apparatus.

#### Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

High risk of slipping due to leakage/spillage of product. Use personal protective clothing. Ensure adequate ventilation. Keep away sources of ignition. Use breathing apparatus if exposed to vapours/dust/aerosol. Avoid contact with skin, eyes and clothing. Refer to protective measures listed in Sections 7 and 8.

#### 6.2. Environmental precautions

Do not discharge into the subsoil/soil. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater.

#### 6.3. Methods and material for containment and cleaning up

Pick up with absorbent material. Clean contaminated floors and objects thoroughly, observing environmental regulations. Dispose of as prescribed.

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

Observe the usual precautions for handling chemicals.

#### Advice on protection against fire and explosion

No special measures required.

#### Classification of fires / temperature class / Ignition group / Dust explosion class

Classification of fires B (Combustible liquid substances)

#### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Store product in closed containers.

# Hints on storage assembly

Do not store together with foodstuffs.

# Further information on storage conditions

Keep container tightly closed and dry. Protect from heat and direct sunlight.

#### 7.3. Specific end use(s)

Lubricants

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### Other information

There are not known any further control parameters.

#### 8.2. Exposure controls

General protective and hygiene measures



Trade name: LUKOIL MS-20

Version: 1 / RO Rev. Date revised: 29.08.2022

Product no.: PF484100 Replaces Version: -/RO Print date: 28.11.2022

Observe the usual precautions for handling chemicals.

#### Respiratory protection

Not necessary, but do not inhale vapours. If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn.

#### **Hand protection**

Gloves

Appropriate Material neoprene

#### Eye protection

Safety glasses with side protection shield

#### **Body protection**

Clothing as usual in the chemical industry.

# **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state liquid

Colourbrownish yellowOdourcharacteristic

Density and/or relative density

Value 891 kg/m³

Temperature 20 °C

Method ASTM D 4052

**Viscosity** 

kinematic

Value 299,2 mm<sup>2</sup>/s

Temperature 40 °C

Method ASTM D 445

Flash point

Value >= 265 °C

Method ISO 2592

**Pourpoint** 

Value <= -18 °C

Method DIN/ISO 3016

**Melting point** 

Remarks not determined

Freezing point

Remarks not determined

#### Boiling point or initial boiling point and boiling range

Remarks not determined

Flammability

not determined

#### Upper and lower explosive limits

Remarks not determined

#### Boiling point or initial boiling point and boiling range

not determined

Ignition temperature

Remarks not determined

**Decomposition temperature** 



Trade name: LUKOIL MS-20

Version: 1/RO Rev. Date revised: 29.08.2022

Product no.: PF484100 Replaces Version: -/RO Print date: 28.11.2022

Remarks not determined

pH value

Remarks Not applicable

Solubility(ies)

Remarks not determined Partition coefficient n-octanol/water (log value)

Remarks not determined

Vapour pressure

Remarks not determined

Relative vapour density

Remarks not determined

9.2. Other information

**Odour threshold** 

Remarks not determined

**Evaporation rate (ether = 1):** 

Remarks not determined

Solubility in water

Remarks not determined

**Auto-ignition temperature** 

Remarks Not applicable

**Explosive properties** 

evaluation not determined

**Oxidising properties** 

Remarks not determined

Other information
None known

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

#### 10.2. Chemical stability

No hazardous reactions known.

#### 10.3. Possibility of hazardous reactions

Oxidising agents

#### 10.4. Conditions to avoid

No hazardous reactions known.

#### 10.5. Incompatible materials

Oxidising agents, Reactions with strong acids.

#### 10.6. Hazardous decomposition products

Possible in traces

#### Other information

Relevant information in Section 2:

# **SECTION 11: Toxicological information**



Trade name: LUKOIL MS-20

Version: 1/RO Rev. Date revised: 29.08.2022

Product no.: PF484100 Replaces Version: -/RO Print date: 28.11.2022

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

**Acute oral toxicity** 

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

**Acute oral toxicity (Components)** 

Baseoil - unspecified

Species rat

LD50 > 5000 mg/kg

Method OECD 401

Remarks Test conducted with a similar formulation.

**Acute dermal toxicity** 

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

**Acute dermal toxicity (Components)** 

Baseoil - unspecified

Species rabbit

LD50 > 5000 mg/kg

Method OECD 402

Remarks Test conducted with a similar formulation.

Acute inhalational toxicity

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

**Acute inhalative toxicity (Components)** 

Baseoil - unspecified

Species rat

LC50 > 5,53 mg/l

Duration of exposure 4 h

Method OECD 403

Remarks Test conducted with a similar formulation.

Skin corrosion/irritation

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

Serious eye damage/irritation

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

Sensitization

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

Subacute, subchronic, chronic toxicity

Remarks not determined

Mutagenicity

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

Reproductive toxicity

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

Carcinogenicity

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

**Specific Target Organ Toxicity (STOT)** 

Single exposure

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

Repeated exposure

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

Aspiration hazard

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



Trade name: LUKOIL MS-20

Version: 1/RO Rev. Date revised: 29.08.2022

Product no.: PF484100 Replaces Version: -/RO Print date: 28.11.2022

#### **Endocrine disrupting properties with respect to humans**

This substance does not have endocrine disrupting properties with respect to humans.

#### Ingredient data

#### **Acute oral toxicity (Components)**

Baseoil - unspecified

Species rat

LD50 > 5000 mg/kg

Method OECD 401

Remarks Test conducted with a similar formulation.

#### **Acute dermal toxicity (Components)**

Baseoil - unspecified

Species rabbit

LD50 > 5000 mg/kg

Method OECD 402

Remarks Test conducted with a similar formulation.

#### **Acute inhalative toxicity (Components)**

Baseoil - unspecified

Species rat

LC50 > 5,53 mg/l

Duration of exposure 4 h

Method OECD 403

Remarks Test conducted with a similar formulation.

Other information

No toxicological data are available.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

#### **General information**

not determined

#### Fish toxicity (Components)

Baseoil - unspecified

Species Fathead minnow (Pimephales promelas)
LL50 > 100 mg/l

Duration of exposure 96 h

Method OECD 203

Remarks Test conducted with a similar formulation.

Baseoil - unspecified

Species Fathead minnow (Pimephales promelas)
NOEL >= 100 mg/l

Duration of exposure 96 h

Method OECD 203

Remarks Test conducted with a similar formulation.

#### **Daphnia toxicity (Components)**

Baseoil - unspecified

Species Daphnia magna

EL50 > 10000 mg/l

Duration of exposure 48 h

Method OECD 202

Remarks Test conducted with a similar formulation.



Trade name: LUKOIL MS-20

Version: 1/RO Rev. Date revised: 29.08.2022

Product no.: PF484100 Replaces Version: -/RO Print date: 28.11.2022

Baseoil - unspecified

Species Daphnia magna

NOEL >= 10000 mg/l

Duration of exposure 48 h

Method OECD 202

Remarks Test conducted with a similar formulation.

Algae toxicity (Components)

Baseoil - unspecified

Species Pseudokirchneriella subcapitata

NOEL >= 100 mg/l

Duration of exposure 72 h

Method OECD 201

Remarks Test conducted with a similar formulation.

12.2. Persistence and degradability

**General information** 

not determined

Biodegradability

evaluation not readily degradable

12.3. Bioaccumulative potential

**General information** 

not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

Octanol/water partition coefficient (log Pow) (Components)

Distillates (Petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified

log Pow 3,9 to 6

12.4. Mobility in soil

**General information** 

not determined

12.5. Results of PBT and vPvB assessment

**General information** 

not determined

Results of PBT and vPvB assessment

The Substance does not meet PBT-criteria.

This substance does not meet the vPvB-criteria.

12.6 Endocrine disrupting properties

**Endocrine disrupting properties with respect to the envrionment** 

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

**General information** 

not determined

General information / ecology

Do not discharge product unmonitored into the environment.

**SECTION 13: Disposal considerations** 



Trade name: LUKOIL MS-20

Version: 1/RO Rev.

Date revised: 29.08.2022

Product no.: PF484100 Replaces Version: -/RO Print date: 28.11.2022

#### 13.1. Waste treatment methods

#### Disposal recommendations for the product

EWC waste code 13 02 05\* mineral-based non-chlorinated engine, gear and lubricating

oils

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Dispose of waste according to applicable legislation.

#### Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal

company.

EWC waste code 15 01 10\* packaging containing residues of or contaminated by

dangerous substances

**SECTION 14: Transport information** 

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport	The product does not constitute a hazardous substance in sea transport	The product does not constitute a hazardous substance in air transport
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
Label			
14.4. Packing group	-	-	-
14.5. Environmental hazards		no	
	-		-

#### Information for all modes of transport

14.6. Special precautions for user

See Sections 6 to 8

#### Other information

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

# **SECTION 15: Regulatory information**

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

#### Other information

There is no data available on the product apart from the information given in this subsection.

### 15.2. Chemical safety assessment

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



Trade name: LUKOIL MS-20

Product no.: PF484100

Version: 1/RO Rev.

Date revised: 29.08.2022 Replaces Version: -/RO Print date: 28.11.2022

# **SECTION 16: Other information**

#### **Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\* This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.



# LUKOIL MS-20

#### Aviation oil

#### Meets requirements

GOST 21743

#### Product description

LUKOIL MS-20 is solvent-refined mineral oil without additives.

#### **Application**

LUKOIL MS-20 is approved for use in aircraft piston engines, gas turbine engines, helicopter gear cases, and feathering hinges of MI helicopter rotor heads. It is used in oil blends for the following applications:

- lubricating systems of aircraft turbo-prop engines;
- feathering hinges of helicopter rotor heads
- · engine compressors of gas compressor units
- speed governors of diesel engines with self-contained oil systems and crankcases

#### Features and benefits

- Provide deterging properties
- Minimal deposits in combustion chambers, spark plugs, rings, pistons, and other components
- Reduced wear
- Increased equipment reliability
- High oxidative and thermal stability
- Easier cold starting
- Excellent high temperature properties

#### Typical test data

The information given in the typical data does not constitute a specification and can be affected by allowable production tolerances. The right to make modifications is reserved by LUKOIL LUBRICANTS EAST EUROPE S.R.L.

Editor E S.K.E.		
Property	Test methods	Value
Density at 15°C, kg/m3	ASTM D 7042	894.6
Kinematic viscosity at 100 °C, mm2/s	ASTM D 7042	22.44
Viscosity index	ASTM D 7042/ SR ISO 2909	92
Conradson Carbon Residue, %	ASTM D 189-14	0.27
Neutralization index, mg KOH/g	ASTM D 1401/ STAS 56 met. II	0.02
Ash	ASTM D 482	0.003
Flash point, COC, °C	ASTM D 92/ SR ISO 2592	275
Pour point, °C	ASTM D 97/ SR 13552	-18
Colour	ASTM D 6045	5

#### Shelf life and storage

When stored in the original unopened containers in a dry place, this product has a shelf life of 5 years from the date of production.

#### Safety, Health, Environment

This product doesn't contain any toxic ingredients. During storage, transportation and application of this product, the safety rules for handling lubricating materials and the environment protection regulations must be observed. For further information on how to use LUKOIL products, please refer to the material safety data sheet.

16.05.2023\*, Page 1/1

\*This document superseeds all previous versions

No 235, Mihai Bravu Street - 100410 Ploiesti, Prahova, Romania Entry: Gate 5 - East Ring Road DN1A

Tax Identification No: RO19737772

Trade Register No: J29/1451/08.10.2015

Tel.: +4 0244 504 802 Fax: +4 0244 504 801 Member of





