

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 23049.01.01.1

Grease YUKO CIATIM-201

Manufacturer: JV YUKOIL LLC

Packed by: JV YUKOIL LLC

Viscosity grade: **NLGI 2**

Production date: June 2024

Package: pail 20L tin

Batch No: 23049.04.06.24.01.



Test	Norm	Result	Test method
Appearance	smooth homogeneous from light yellow to light brown color	Homogeneous ointment without lumps light yellow color	p. 3.2
Effective viscosity at 50°C and with average gradient of the strain rate 10 s ⁻¹ , not more	1 100	1 100	ASTM D1092
Shear strength at 50°C, Pa	250-500	360	GOST 7143
Dropping point, °C, not low than	175	200,5	ASTM D2265
Oil separation, %, not more than	26	8,9	GOST 7142
Corrosive effect on metals	pass	pass	GOST 9.080
Oxidation stability, not more	3	3,00	ASTM D943
Mass part of free alkali calculated to NaOH, %, not more	0,1	0,10	GOST 6707
Water content	absence	absence	ASTM D95
Mass fraction of mechanical impurities	absence	absence	ASTM D128
Evaporation, %, not more	25	2,50	GOST 9566
Penetration at 25°C	not defined	230	GOST 5346

Result: the product quality meets the standard of

seal

Head of Quality Assurance Department



	<p style="text-align: center;">ALCO QUALITY ASSURANCE LABORATORY TEST REPORT Accreditation No: AZS ISO/IEC 17025:2020/AZ 01.0571.01.21</p>	
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Company: ALCO LLC
3, Vali Mammadov st., Sabail dist.
AZ1095, Baku, Azerbaijan

Certificate No.: 2024580
Date of issue: 05/06/2024

Test sample

Product: AVTOIL ЖТ-79Л
Batch number: 2406580
Tank ID: T41.1

Manufacture date: 05/06/2024
Date of sampling: 05/06/2024
Date of analysis: 05/06/2024

Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear		Pass
Penetration at 25°C	mm ⁻¹	GOST 5346 method B	240-290	280	Pass
Viscosity effective and average strain rate gradient, 10c ⁻¹ - at -55°C temperature	Pa	GOST 7163	Max.1600	1530	Pass
Strength limit at 50°C	Pa	GOST 7143 method B	Min. 250	320	Pass
Colloidal stability	%	GOST 7142	Max. 15.0	6.8	Pass
Corrosion effect on metals	-	GOST 9.080	pass	Pass	Pass
Mass fraction of free alkali in NaOH	%	GOST 6707	Max. 0.25	0.02	Pass
Mechanical impurities	%	GOST 6479	None	None	Pass
Lubrication properties on a four-ball machine, critical load	N	GOST 9490	Min. 392(40)	392	Pass
Change in mass of rubber brand 6659 or brand 7130 after being in lubricant for 24 hours, at 70°C	-	GOST 9 030	±3.0	±0.5	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



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Quality Certificate No 51091.01.01.1

Grease YUKO YUKO ZHRO (NLGI 3)

Manufacturer: JV YUKOIL LLC

Packed by: JV YUKOIL LLC

Viscosity grade: **NLGI 3**

Production date: December 2021

Package: barrel 200L metal

Batch No: 51091.22.12.21.01.



Test	Norm	Result	Test method
Appearance	homogeneous ointment from light brown to dark brown	homogeneous light brown ointment	GSTU 38.001 or 6.3 TU
Dropping point, °C, not low than	180	200,0	ASTM D2265
Penetration at 25 °C with stirring, m · 10 ⁻⁴	190 - 250	230	ASTM D217
Viscosity is effective at an average deformation rate gradient of 10 s ⁻¹ , Pa · s:			ASTM D1092
at minus 30 °C	2 000	1 450	ASTM D1092
Shear strength at 50°C, Pa, not less than	not less 350	380	GOST 7143
Colloidal stability: mass fraction of oil pressed from the oil,%, not more than	15	8,2	GOST 7142
Evaporation, %, not mor than	2,5	0,69	GOST 9566
Corrosive effect on metals	Pass	pass	GOST 9.080
Oxidation stability, mg KOH/g, not more than	3	1,05	ASTM D943
Mass fraction of mechanical impurities, %, not more than	Absence	0,022	ASTM D128
Mass part of free alkali calculated to NaOH, %, not more than	0,25	0,010	GOST 6707

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:





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

Certificate No.: 2024582
Date of issue: 06/06/2024

Test sample

Product: AVTOIL CTP-3
Batch number: 2406582
Tank ID: T41.2

Manufacture date: 06/06/2024
Date of sampling: 06/06/2024
Date of analysis: 06/06/2024

Test result

Parameters	Unit	Limit	Test result	Conclusion
Appearance	-	Bright & Clear		Pass
Micro-penetration, without mixing - at 0°C - at -50°C	mm 10 ⁻¹	80-100 Min. 25	90 29	Pass
Sulphur content	%	Min. 0.8	1.7	Pass
Conditional viscosity at 25°C	%	5-10	6.44	Pass
Corrosion on metals	-	pass	pass	Pass
Water content	%	None	None	Pass
Tribological characteristics at a temperature of (20 ± 5) °C - welding load - badass index - critical load	N	Min. 2450 Min. 588 Min. 1235	2450 620 1235	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



	<p style="text-align: center;">ALCO QUALITY ASSURANCE LABORATORY TEST REPORT</p> <p style="text-align: center;">Accreditation No: AZS ISO/IEC 17025:2020/AZ 01.0571.01.21</p>	
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Company: ALCO LLC
3, Vali Mammadov st., Sabail dist.
AZ1095, Baku, Azerbaijan

Certificate No.: 202444
Date of issue: 12/01/2024

Test sample

Product: AVTOIL GRAPHITE GREASE
Batch number: 2401044
Tank ID: T41.2

Manufacture date: 12/01/2024
Date of sampling: 12/01/2024
Date of analysis: 12/01/2024

Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Homogeneous ointment from dark brown to black color		Pass
Dropping temperature	°C	GOST 6793	Min. 77	93	Pass
Penetration at 25°C with stirring 60 double cycles	mm ⁻¹	GOST 5346 method B	Min. 250	270	Pass
Viscosity effective and average strain rate gradient, 10c ⁻¹ - at 0°C temperature	Pa	GOST 7163	Max. 100(1000)	90	Pass
Strength limit at 50°C	Pa	GOST 7143 method B	Min. 100(1.0)	150	Pass
Colloidal stability	%	GOST 7142	Max. 5	5	Pass
Water content	%	GOST 2477	Max. 3.0	1.0	Pass
Corrosion effect on metals	-	GOST 9.080	pass	Pass	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



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

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Authorised signatory

**Allahverdieva Aytan
Head of Laboratory**

**Isgandarli Nazrin
Chemical Engineer**



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Quality Certificate No 06033.03.01.1

Grease YUKO Litol-24

Manufacturer JV YUKOIL LLC

Packed by JV YUKOIL LLC

Viscosity grade:

Quality Index: **K3K-40, ISO-L-XDCEA3**

Production date: February 2024

Package: pail 20L tin

Batch No: 06033.07.02.24.01.



Test	Norm	Result	Test method
Appearance	homogeneous ointment with a smooth structure from light yellow to dark brown	smooth homogeneous yellow ointment	GOST 38.001
Dropping point, °C, not low than	140	148	ASTM D2265
Worked penetration at 25°C, 0.1 mm	230-290	240	ASTM D217
Effective viscosity at minus 20°C and with average gradient of the strain rate 10 s ⁻¹ , Pa·s, not more than	1500	564	ASTM D1092
Oil separation, %, not more than	15,0	8,00	GOST 7142
Shear strength at 50°C, Pa, not less than	150	360	GOST 7143
Evaporation, %, not mor than	5,0	0,89	GOST 9566
Corrosive effect on metals	pass	pass	GOST 9.080
- welding load, N, not less	1 381	1 381	ASTM D2596

Result: the product quality meets the standard of

seal

Head of Quality Assurance Department



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

Certificate No.: 202420
Date of issue: 12/01/2024

Test sample

Product: AVTOIL SOLIDOL
Batch number: 2401045
Tank ID: T41.3

Manufacture date: 12/01/2024
Date of sampling: 12/01/2024
Date of analysis: 12/01/2024

Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Homogeneous ointment without lumps, from light yellow to dark brown		Pass
Dropping temperature	°C	GOST 6793	Min. 78	96	Pass
Penetration at 25°C with stirring 60 double cycles	mm ⁻¹	GOST 5346 method B	230-290	252	Pass
Viscosity effective and average strain rate gradient, 10c ⁻¹ - at 0°C temperature	Pa	GOST 7163	Max. 250	220	Pass
Strength limit at 50°C	Pa	GOST 7143 method B	Min. 196	225	Pass
Mass fraction of free alkali in NaOH	%	GOST 6707	Max. 0.2	0.03	Pass
Organic acid content	%	GOST 6707	None	None	Pass
Water content	%	GOST 2477	Max. 2.5	2.0	Pass
Mechanical impurities content, insoluble in hydrochloric acid	%	GOST 6479	None	None	Pass
Mass fraction of calcium soaps of fatty acids that are part of natural fats	%	GOST 5211	Min. 11.0	18.0	Pass

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

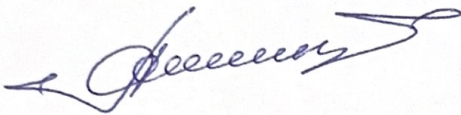
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Allahverdiyeva Aytan
Head of Laboratory



Isgandarli Nazrin
Chemical Engineer





Изготовитель ООО "Черкасский завод автохимии", Украина, г. Черкассы,
ул. В.Чорновола 118, тел. +38 (0472) 64-24-04, 64-04-90

ПАСПОРТ КАЧЕСТВА № 16-1834/2

**Жидкость охлаждающая
низкозамерзающая марки А-38 красный
Антифриз Ст12+
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
	<input type="checkbox"/> алюминий	0,1	0,08	
	<input type="checkbox"/> чугун	0,1	0,07	
	<input type="checkbox"/> сталь	0,1	0,06	
	<input type="checkbox"/> медь	0,1	0,05	
	<input type="checkbox"/> латунь	0,1	0,06	
	<input type="checkbox"/> припой	0,2	0,12	
6	Вспениваемость:			ГОСТ 28084-89, п.4.6
	<input type="checkbox"/> Объем пены, см3 не больше	30	0,00	
	<input type="checkbox"/> 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 Лавренко Т. А.

Подпись

Печать

