

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

Certificate No.: 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	mm ² /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	Max. -20	<-23	Pass
Color.	-	ASTM D1500	Test & Report	3.9	Pass
Density at 15 °C	g/cm ³	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.



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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.
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Authorised singnatory

Allahverdiyeva Aytan
Head of Laboratory

Isgandarli Nazrin
Lead Chemical Engineer

СЕРТИФІКАТ / CERTIFICATE № 59

Олива редукторна / Gear oil

И-Т-Д-220 / I-T-D-220

ТУ 38.1011337-90 /

TU 38.1011337-90

Партія / Party № 1

Резервуар / Tank № 37

Маса / Net mass 2300 кг / kg

Дата виготовлення / Date of manufacture 10.02. 2025 p./y.

Physical and chemical parameters

№№	Найменування показника / Properties	Норма / Norma	Фактично / Fact	Метод випробування / Test method
1.	В'язкість кінематична при 40°C, мм²/с, у межах Viscosity, Kinematic at 40°C, mm²s⁻¹	198-242 198-242	205,41	ДСТУ ГОСТ 33 DSTU GOST 33
2.	Кислотне число, мг КОН/г оливи, не більше Viscosity Index	1,0 Max 1.0	0.88	ГОСТ 5985 GOST 5985
3.	Зольність загальна, %, не більше Ash, %	0,3 Max 0.3	0.21	ГОСТ 1461 GOST 1461
4.	Масова частка механічних домішок, %, не більше Solid Particle Contamination, wt.%	відсутність No	відсутність No	ДСТУ ГОСТ 6370 DSTU GOST 6370
5.	Масова частка води, не більше Water Content	сліди Trace	відсутність No	ДСТУ ГОСТ 2477 DSTU GOST 2477
6.	Густина при 20°C, кг/м³, не більше Density at 20°C, kg/m³	920 Max 920	898.2	ГОСТ 3900 GOST 3900
7.	Температура застигання, °C, не вище Pour Point, °C	мінус 18 Max Minus 18	мінус 20 Minus 20	ГОСТ 20287 GOST 20287
8.	Температура спалаху, що визначається у відкритому тиглі, °C, не нижче Flash Point, °C	210 Min 210	261	ДСТУ ГОСТ 4333 DSTU GOST 4333
9.	Трибологічні властивості, визначені на машині тертя ЧКМ: індекс задиру (I _з), Н, не менше діаметр плями зношування (Д _з), мм, не більше Tribological properties determined on the CMM friction machine: Scuff Index, N Wear Index at a Load of 196 N at (20±5)°C for 1 hour, mm	490 0,45 Min 490 Max 0.45	490 0.45	ГОСТ 9490 GOST 9490
10.	Випробування на корозію Corrosion testing	витримує Withstand	витримує Withstand	ГОСТ 2917 GOST 2917
11.	Колір на колориметрі ЦНТ, одиниці ЦНТ, не більше Color CNT, units CNT	8,0 Max 8.0	4.5	ГОСТ 20284 GOST 20284

Висновок: Олива редукторна И-Т-Д-220 відповідає вимогам ТУ 38.1011337-90.

Conclusion: Gear oil I-T-D-220 corresponds to TU 38.1011337-90.

Гарантійний термін зберігання оливи - 2 роки від дня виготовлення за умови її зберігання згідно з ДСТУ 4454.

The warranty period of oil storage is 2 years from the date of manufacture, provided it is stored in accordance with DSTU 4454.

Інженер ЦЗЛ / Engineer CPL _____

Ст. лаборант / Senior laboratory _____

Дата видачі паспорта / Date of issue 14.02. 2025 p./y.

	<p 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.: 20241029
Date of issue: 02/07/2024

Test sample

Product: AVTOIL INDUSTRIAL HYDRAULIC HLP 46
Batch number: 24071029
Tank ID: T45.2

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

Test result

Parameters	Unit	Test method	Limit	Test result	Conclusion
Appearance	-	Visual	Bright & Clear	Bright & Clear	Pass
Kinematic viscosity at 40 °C	mm ² /s	ASTM D445	41.4-50.6	46.09	Pass
Viscosity index	-	ASTM D2270	Min. 90	108	Pass
Water content	%	ASTM D95	Max. 0.05	None	Pass
Flash Point, COC	°C	ASTM D92	Min. 185	224	Pass
Pour Point	°C	ASTM D97	Max. -24	-24	Pass
Color	-	ASTM D1500	Test & Report	2.0	Pass
Density at 15 °C	g/cm ³	ASTM D4052	Test & Report	0.8719	Pass

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