

CERTIFICATE OF ANALYSIS № 837

Turbine oil TP-22S

TU U 19.2-37838186-008:2012, zm. 1



Batch № 837

Manufacturing date: 29.07.22

Batch net weight: 2,45 t

Product Characteristics

№	Characteristics and units	Standard limits	Actual	Test method
1	Kinematic viscosity at 40oC, cSt, in range	29-35	32,98	DSTU GOST 33
2	Viscosity Index, not lower than	95	138	DSTU GOST 25371
4	Flash point, °C, not lower than	185	206	DSTU GOST 4333
5	Pour point, °C, not more than	-15	-22	GOST 20287 method B
6	Ash content base oil, %, not more than	0,05	0,03	GOST 1461
7	Mechanical impurities content, %, not more than	nil	nil	GOST 6370
8	Water content, %, not more than	0,03	nil	GOST 2477
9	Density at 20 °C, kg/m3, not more than	900	863	GOST 3900
11	Colour on colorimeter, not more than	2,5	1,0	GOST 20284
12	Sequence I, not more than	100/50	0/0	GOST 23652 p.5.5
13	Sequence II, not more than	50/50	30/0	GOST 23652 p.5.5
14	Sequence III, not more than	100/50	0/0	GOST 23652 p.5.5

Manufactured by KSM PROTEC LLC, Ukraine

Conclusion: Turbine oil TP-22S sample satisfies the requirement of TU U 19.2-37838186-008:2012, zm. 1 standard based on characteristics analyzed.

Shelf life - 5 years from date of manufacture



Laboratory technician

Laboratory head

Date of issue: 30.07.22

CERTIFICATE OF ANALYSIS № 292

OIL PROTEC IG-40

TU U 19.2-37838186-005:2012 zm.1,2



Batch № 292

Manufacturing date: 24.04.23

Batch net weight: 9 t

Product Characteristics

№	Characteristics and units	Standard limits	Actual	Test method
1	Kinematic viscosity at 40°C, cSt, in range	51-75	64,76	DSTU GOST 33 or ASTM D445
2	Total acid number, mg KOH per 1 g, not more than	0,07	0,010	GOST 11362 and P.7.6
3	Flash point, °C, not lower than	200	236	DSTU GOST 4333 or ASTM D92
4	Pour point, °C, not more than	-10	-12	GOST 20287 method B or ASTM D97
5	Mechanical impurities content, %, not more than	0,015	nil	GOST 6370 or ASTM D2273
6	Water content, %, not more than	0,03	0,03	GOST 2477 or ASTM D95
7	Density at 20 °C, kg/m ³ , not more than	910	865	GOST 3900 or ASTM D1298
8	Oxidation stability: acid number, mg KOH/g, not more than	0,4	0,29	DSTU GOST 18136 (GOST 18136)
9	Oxidation stability: increase in resins, %, not more than	3	1,15	DSTU GOST 18136 (GOST 18136)
10	Sulfur weight, %, not more than	1,3	0,26	GOST 1437 or ASTM D4927
11	Colour on colorimeter, not more than	4,0	2,5	GOST 20284 or ASTM D1500

Manufactured by KSM PROTEC LLC, Ukraine

Conclusion: Oil PROTEC IG-40 sample satisfies the requirement of TU U 19.2-37838186-005:2012 zm.1,2 standard based on characteristics analyzed.

Shelf life - 5 years from date of manufacture.



Laboratory technician

Laboratory head

Date of issue: 26.04.23

CERTIFICATE OF ANALYSIS № 858

Compressor oil KS-19

GOST 9243-75 zm.1-5



Batch № 858

Manufacturing date 04.08.21

Batch net weight 32 t

Product Characteristics

№	Characteristics and units	Standard limits	Actual	Test method
1	Kinematic viscosity at 100oC, cSt, in range	18-22	19,69	DSTU GOST 33
2	Viscosity Index, not lower than	92	116	DSTU GOST 25371
3	Acid number, mg KOH per 1 g, not lower than	0,02	0,017	GOST 5985
4	Flash point, °C, not lower than	260	279	DSTU GOST 4333 or ASTM D92
5	Pour point, °C, not more than	-15	-33	GOST 20287 method B
6	Mechanical impurities content, %, not more than	nil	nil	GOST 6370
7	Water content, %, not more than	nil	nil	GOST 2477
8	Density at 20 °C, kg/m3, not more than	905	867	GOST 3900
9	Oxidation stability: sediment, %, not more than	nil	nil	GOST 981
10	Oxidation stability: acid number, mg KOH/r, not more than	1,0	0,43	GOST 981
11	Corrosion on plumbum plates of the C1 or C2 brands in accordance with GOST 3778-77, g/m2, not more than	10,0	7,5	GOST 20502
12	Sulfur weight, %, not more than	1,0	0,4	GOST 1437
13	Presence of water-soluble acids and alkalis	nil	nil	GOST 6307
14	Ash content,%, no more than	0,005	0,005	GOST 1461
15	Coking, %, not more than	0,500	0,300	GOST 19932
16	Presence of selective solvents	nil	nil	GOST 1057
17	Tendency to varnish at a temperature of 200 oC for 30 min,%, not more than	3,5	3,0	GOST 23175
18	Color on the CNT colorimeter, units CNT, no more than	7,0	3,5	GOST 20284

Manufactured by KSM PROTEC LLC, Ukraine

Conclusion: Compressor oil KS-19 sample satisfies the requirement of TU U 19.2-37838186-004:2012 zm.1 standard based on characteristics analyzed.



Shelf life - 5 years from date of manufacture



Laboratory technician

Laboratory head

Date of issue 20.06.20 p.

MOGUL OIL® Compressor A 46, 68, 100, 150, 220
ULEIURI PENTRU COMPRESOARE

Descriere:

Uleiurile pentru compresoare **MOGUL OIL® Compressor A 46, 68, 100, 150, 220** sunt formulate din uleiuri minerale parafin-naftenice combinate cu un pachet de aditivi speciali ca le asigura protectie la coroziune si stabilitate termica,

Utilizare:

MOGUL OIL® Compressor A 46, 68, 100, 150, 220 se utilizeaza ca la lubrifierea compresoarelor cu piston echipate cu sistem de lubrifiere de tip circulant sau mixt care necesita uleiuri cu stabilitate ridicata la oxidare, protectie impotriva ruginii si coroziunii, precum si temperatura aerului la iesire de pina la 220°C. Ele pot fi utilizate si in compresoarele cu piston unde presiunea aerului este de 800 kP si temperatura aerului la iesire este sub 90°C.

Clasificare, specificații:

DIN 51506 VDL

Proprietăți caracteristice:

- buna stabilitate termica;
- protectie la coroziune;
- volatilitate scazuta;

Caracteristici:

Parametri MOGUL OIL® Compressor A 46	Unitatea de masura	Valori tipice	Metoda de analiza
Densitate la 20 °C	g/m ³	0.872	EN ISO 3675
Viscozitate cinematica la 40°C	cSt	46	SR EN ISO 3104
Indice de viscozitate, min		95	ISO 2909
Punct de curgere	°C	-15	ISO3016
Punct de inflamabilitate, COC	°C	210	EN ISO 2592
Actiune coroziva pe lama de cupru (3h,100°C)		1b	EN ISO 2160
Parametri MOGUL OIL® Compressor A 68	Unitatea de masura	Valori tipice	Metoda de analiza
Densitate la 20 °C	g/m ³	0.879	EN ISO 3675
Viscozitate cinematica la 40°C	cSt	68	SR EN ISO 3104
Indice de viscozitate, min		95	ISO 2909
Punct de curgere	°C	-15	ISO3016
Punct de inflamabilitate, COC	°C	215	EN ISO 2592

MOGUL OIL®
Compressor A 46, 68, 100, 150, 220

INFORMATII TEHNICE

Actiune coroziva pe lama de cupru (3h,100°C)		1b	EN ISO 2160
Parametri MOGUL OIL® Compressor A 100	Unitatea de masura	Valori tipice	Metoda de analiza
Densitate la 20 °C	g/m3	0.885	EN ISO 3675
Viscozitate cinematica la 40°C	cSt	100	SR EN ISO 3104
Indice de viscozitate, min		98	ISO 2909
Punct de curgere	°C	-15	ISO3016
Punct de inflamabilitate, COC	°C	225	EN ISO 2592
Actiune coroziva pe lama de cupru (3h,100°C)		1b	EN ISO 2160

Parametri MOGUL OIL® Compressor A 150	Unitatea de masura	Valori tipice	Metoda de analiza
Densitate la 20 °C	g/m3	0.889	EN ISO 3675
Viscozitate cinematica la 40°C	cSt	150	SR EN ISO 3104
Indice de viscozitate, min		95	ISO 2909
Punct de curgere	°C	-13	ISO3016
Punct de inflamabilitate, COC	°C	235	EN ISO 2592
Actiune coroziva pe lama de cupru (3h,100°C)		1b	EN ISO 2160

Parametri MOGUL OIL® Compressor A 220	Unitatea de masura	Valori tipice	Metoda de analiza
Densitate la 20 °C	g/m3	0.895	EN ISO 3675
Viscozitate cinematica la 40°C	cSt	2200	SR EN ISO 3104
Indice de viscozitate, min		93	ISO 2909
Punct de curgere	°C	-12	ISO3016
Punct de inflamabilitate, COC	°C	245	EN ISO 2592
Actiune coroziva pe lama de cupru (3h,100°C)		1b	EN ISO 2160

Ambalare: 20L si 200L.

Termen de garantie: 5ani in depozitare.