

OILTECH®TRANS GL-5 80W90

1. GENERALITATI

OILTECH®TRANS GL-5 80W90 este un ulei de transmisie multigrad, fabricat din uleiuri de bază minerale de foarte buna calitate, rafinate prin hidrogenare și un pachet de aditivi foarte performant. Are caracteristici îmbunătățite pentru utilizare la presiuni ridicate (așa-zisele EP).

2. DOMENIUL DE UTILIZARE

Este destinat lubrifierii transmisiilor extrem de solicitate ale automobilelor moderne și ale restului de tehnică mobilă; este adecvat și pentru alte tipuri de transmisii selectate (îndeosebi cele hipoidale, melcate etc.) în special pentru condiții de exploatare extreme. Se poate utiliza pe tot cursul anului, avantajoasă fiind utilizarea acestuia la temperaturi scăzute, dar și la temperaturi obișnuite sau ridicate, unde garantează fiabilitatea cutiei de viteze. Utilizarea în aplicații industriale (de exemplu, cutii de viteze industriale extrem de solicitate care lucrează într-o gamă de temperatură foarte largă) este, de asemenea, posibilă.

Proprietăți caracteristice:

- garantează o uzură redusă și o fiabilitate înaltă în exploatarea transmisiilor prin angrenaje care funcționează în game de temperatură largi precum și la solicitări extrem de mari;
- are o stabilitate înaltă la oxidare - permite prelungirea intervalului de schimb al uleiului;
- are caracteristici anticorozive excelente - protejează foarte bine contra coroziunii și în cazul în care vehiculul staționează perioade lungi de timp;
- facilitează schimbarea treptelor de viteză, îndeosebi în cadrul unor exploatare în condiții grele de iarnă (caracteristici de variație a viscozității cu temperatura favorabile);
- are o toleranță excelentă la elastomeri;
- are o tendință foarte mică de spumare.

3. NIVELUL DE PERFORMANTA

API GL-5

Indeplinește: MAN 342 Typ M2, MIL-L-2105D,

ZF TE-ML 02B · ZF TE-ML 05A · ZF TE-ML 12L · ZF TE-ML 12M · ZF TE-ML 16B · ZF TEML 17H · ZF TE-ML 19B · ZF TE-ML 21A.

4. CARACTERISTICI TIPICE

DENUMIREA CARACTERISTICII	LIMITE DE ADMISIBILITATE ® OILTECH TRANS 80W90	METODA DE VERIFICARE SR ISO STAS
Viscozitate cinematica la 100 °C cSt	15.2	EN ISO 3104
Indice de viscozitate,	123	65 6218
Punct de inflamabilitate COC, °C min.	210	EN ISO 2592
Punct de curgere, °C max.	-33	ISO 3016

5. AMBALARE

Produsul se ambalează 20L și 200L.



6. TERMEN DE GARANTIE - 5 ani in depozitare.

PRODUS CU CERTIFICAT DE CONFORMITATE nr. 1447/ Emis de R.A.R. – O.C.P

CERTIFICATE OF ANALYSIS № 4

PROTEC Antifreeze G 12+

TU U 20.5-37838186-015:2019, zm.1

Batch № 4

Manufacturing date 16.01.24 Batch net weight 3 t

Product Characteristics

№	Characteristics and units	Standard limits	Actual	Test method
1	Appearance	Homogeneous transparent liquid without mechanical impurities. The color must match the color of the sample standard	Homogeneous transparent liquid without mechanical impurities of red color	p. 8.4
2	Density at 20 °C, kg/m ³ , not lower	1,068	1,075	DSTU 7261
3	Temperature of the onset of crystallization, °C, not more than	-38	-40	p. 8.5
4	Boiling Point, °C, not lower	104	110	p. 8.13
5	Corrosion effect on metals, g/m ² per day, not more than: copper, brass, steel, cast iron	10	6	ASTM D1384
6	Corrosion effect on metals, g/m ² per day, not more than: aluminum, solder	30	16	ASTM D1384
7	Foaming: the volume of foam, sm ³ , not more than	40	20	p. 8.8 or ASTM D1881
8	Foaming: foam stability, s, not more than	5	0	p. 8.8 or ASTM D1881
9	Swelling rubber, %, not more than	5	3	p. 8.9
10	pH, within	7,5 - 11	9,43	p. 8.10 or ASTM D1287
11	Alkalinity, sm ³ , not lower	3	11,46	p. 8.11
12	Hard Water Stability	Not defined	Not defined	p. 8.12 or ASTM D7437

Manufactured by KSM PROTEC LLC, Ukraine

Conclusion: PROTEC Antifreeze G 12+ sample satisfies the requirement of TU U 20.5-37838186-015:2019, zm.1 standard based on characteristics analyzed.

Shelf life - 5 years from date of manufacture.



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CERTIFICATE OF ANALYSIS № 27

PROTEC Litol -24 M Lubricating Grease

TU U 19.2-37838186-006:2012 zm. 1,2

Batch № 27

Manufacturing date 22.01.24 Batch net weigh 2,06 t

Product Characteristics

№	Characteristics and units	Standard limits	Actual	Test method
1	Appearance	Homogeneous ointment from light yellow to brown color	Homogeneous light brown ointment	GSTU 38.001
2	Penetration at 25°C, 0,1 mm, in range	220 - 280	250	GOST 5346 method V
3	Dropping point, °C, not lower than	145	162	GOST 6793
4	Shear stability at 50°C, Pa, not less than	120	255	GOST 7143 method B
5	Colloid stability, %, of separated oil, not more than	16	6,77	GOST 7142
6	Water content	nil	nil	DSTU GOST 2477
7	Free alkali content NaOH, %, not more than	0,2	0,11	GOST 6707
8	Mechanical impurities content, %, not more than	0,05	0,01	GOST 6479
9	Viscosity at - 20°C and velocity gradient of 10 s ⁻¹ , Pa*s, not more than	1 000	650	GOST 7163
10	Vaporability at 100 °C, %, not more than	8	1	GOST 9566
11	Metal corrosion	Pass	Pass	GOST 9.080
12	Water resistance at 79°C, 1 hour, %, not more than	6	4	ASTM D1264
13	Four ball EP test machine (20±5°C): critical load, N, not less than	610	735	GOST 9490
14	Four ball EP test machine (20±5°C): welding load, N, not less than	1 230	1 600	GOST 9490
15	Four ball EP test machine (20±5°C): scuff index, not less than	270	330	GOST 9490
16	Protective property	Pass	Pass	GOST 9.054 method 1
17	Elastomer of grade 26-44, %: volume change	-8 - 12	-1,8	GOST 9.030

Manufactured by KSM PROTEC LLC, UKRAINE

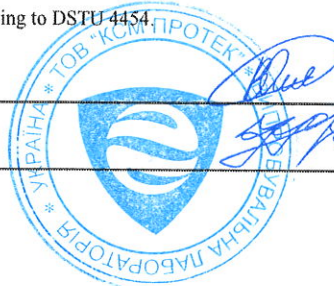
Conclusion: PROTEC Litol -24 M Lubricating Grease sample satisfies the requirement of TU U 19.2-37838186-006:2012 zm. 1,2 standard based on characteristics analyzed.

Shelf life - 5 years from date of manufacture. Storage conditions according to DSTU 4454.

Laboratory technician _____

Laboratory head _____

Date of issue 24.01.24p.



CERTIFICATE OF ANALYSIS № 7

TEMOL Antifreeze Extra G11 Green

TU U 20.5-30858281-009:2016 zm.1,2

Batch № 7

Manufacturing date 23.01.24 Batch net weight 7,4 t

Product Characteristics

№	Characteristics and units	Standard limits	Actual	Test method
1	Appearance	Homogeneous transparent liquid without mechanical impurities. The color must match the color of the sample standard	Homogeneous transparent liquid without mechanical impurities of green color	p.7
2	Density at 20 °C, kg/m ³ , not lower	1,065	1,072	DSTU 7261
3	Temperature of the onset of crystallization, °C, not more than	-38	-39	p.7.5
4	Boiling Point, °C, not lower	104	106	p.7.13 or ASTM D1120
5	Corrosion effect on metals, g/m ² per day, not more than: copper, brass, steel, cast iron, aluminum	0,15	0,097	p.7.7
6	Corrosion effect on metals, g/m ² per day, not more than: solder	0,35	0,083	p.7.7
7	Foaming: the volume of foam, cm ³ , not more than	150	40	p.7.8 or ASTM D1881
8	Foaming: foam stability, s, not more than	5	3	p.7.8 or ASTM D1881
9	pH, within	7,5 - 11	8,35	DSTU 2201.1 and p.7.10 or ASTM D1287 and p.7.10
10	Alkalinity, sm ³ , not lower	1,5	2,47	p.7.11

Manufactured by KSM PROTEC LLC, Ukraine

Conclusion: TEMOL Antifreeze Extra G11 Green sample satisfies the requirement of TU U 20.5-30858281-009:2016 zm.1,2 standard based on characteristics analyzed.

Shelf life - 5 years from date of manufacture



Laboratory technician

Laboratory head

Date of issue 23.01.24p.

TEMOL Antifreeze Luxe G12 Red

TU U 20.5-30858281-009:2016 zm.1,2

Batch № 6

Manufacturing date 19.01.24 Batch net weight 7 t

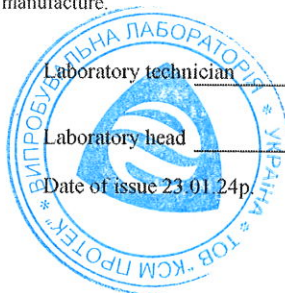
Product Characteristics

№	Characteristics and units	Standard limits	Actual	Test method
1	Appearance	Homogeneous transparent liquid without mechanical impurities. The color must match the color of the sample standard	Homogeneous transparent liquid without mechanical impurities of red color	p.7.4
2	Density at 20.°C, kg/m3, not lower	1.065	1.072	DSTU 7261
3	Temperature of the onset of crystallization, °C, not more than	-38	-40	p.7.5
4	Boiling Point, °C, not lower	104	106	p. 7.13 or ASTM D1120
5	Corrosion effect on metals, g/m2 per day, not more than: copper, brass, steel, cast iron, aluminum	0.15	0.088	p.7.7
6	Corrosion effect on metals, g/m2 per day, not more than: solder	0,3	0,095	p.7.7
7	Foaming: the volume of foam, sm ³ , not more than	150	40	p.7.8 or ASTM D1881
8	Foaming: foam stability,s, not more than	5	0	p.7.8 or ASTM D1881
9	pH, within	7,5 - 11	7,74	DSTU 2201.1 and p.7.10 or ASTM D1287 and p.7.10
10	Alkalinity, sm3, not lower	1,0	1,89	p. 7.11

Manufactured by KSM PROTEC LLC, Ukraine

Conclusion: TEMOL Antifreeze Luxe G12 Red sample satisfies the requirement of TU U 20.5-30858281-009:2016 zm.1,2 standard based on characteristics analyzed.

Shelf life - 5 years from date of manufacture.



Laboratory technician

Laboratory head

Date of issue 23.01.24p.

CERTIFICATE OF ANALYSIS № 22

Motor oil TEMOL Luxe 10W-40

TU U 23.2-30858281-007:2008 zm.1,2,3,4



Batch № 22

API SL/CF

Manufacturing date 14.01.21 Batch net weight 4,5 t

Product Characteristics

№	Characteristics and units	Standard limits	Actual	Test method
1	Kinematic viscosity at 100oC, cSt, in range	12,5 - 16,3	15,89	DSTU GOST 33 or ASTM D445
2	Viscosity Index, not lower than	130	158	DSTU GOST 25371 or ASTM D2270
3	Total base number, mg KOH per 1 g, not lower than	7,0	7,63	DSTU 5094 or ISO 3771 or ASTM D2896
4	Sulfated ash, %, not lower than	1,5	1,00	DSTU GOST 12417 or ASTM D874
5	Flash point (COC), °C, not lower than	200	224	DSTU GOST 4333 or ASTM D92
6	Pour point, °C, not more than	-32	-35	GOST 20287 method B or ASTM D97
7	Density at 20 °C, kg/m3, not more than	905	853	GOST 3900 or ASTM D1298
8	Mechanical impurities content, %, not more than	0,015	nil	GOST 6370 or ASTM D2273
9	Water content, %, not more than	0,03	nil	GOST 2477 or ASTM D95
10	Phosphorus weight, %, not more than	0,12	0,10	GOST 2987 or ASTM D4927
11	Colour on colorimeter (15.85), not more than	4,5	1,0	GOST 20284 or ASTM D1500
12	Cold Cranking Simulatorat viscosity at -25oC, mP*s, not more than	7000	6680	GOST 1929 or p.6.11 or ASTM D5293
13	Corrosion on plumbum plates (DK-NAMI), g/m2, not more than	Pass	Pass	GOST 20502 method A, V.II
14	Stabilization by inductive period of sedimentation (IPS), 50 hours	Pass	Pass	GOST 11063

Manufactured by KSM PROTEC LLC, Ukraine

Conclusion: Motor oil TEMOL Luxe 10W-40 sample satisfies the requirement of TU U 23.2-30858281-007:2008 zm.1,2,3,4 standard based on characteristics analyzed.

Shelf life - 5 years from date of manufacture



Laboratory technician

Laboratory head

Date of issue: 15.01.21

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Охлаждающая жидкость TEMOL Tosol A-40

ТУ У 20.5-30858281-009:2016 из.1



Партия № 12

Дата изготовления 17.02.23 Маса нетто 4 т

Физико-химические показатели

№	Наименование показателя	Норма по НТД	Фактически	Метод испытания
1	Внешний вид	Однородная прозрачная жидкость без механических примесей. Цвет должен соответствовать цвету образца эталона	Однородная прозрачная жидкость без механических примесей синего цвета	П. 8.4
2	Плотность при 20°C, кг/м ³ , не менее	1,065	1,073	ДСТУ 7261
3	Температура начала кристаллизации, °C, не выше	Минус 38	Минус 39	П. 8.5
4	Фракционные данные: температура начала перегонки, °C, не ниже	100	105	П. 8.6
5	Фракционные данные: массовая доля жидкости, перегоняемой до достижения температуры 150°C, %, не более	55	46	П. 8.6
6	Коррозионное воздействие на метилы, г/м ² ·сут, не более: медь, лагунь, сталь, чугун, алюминий	0,3	0,092	П. 8.7
7	Коррозионное воздействие на метилы, г/м ² ·сут, не более: прншой	0,5	0,106	П. 8.7
8	Вспениваемость: объем пены, см ³ , не более	50	40	П. 8.8 или ASTM D1881
9	Вспениваемость: устойчивость пены, с, не более	5	2	П. 8.8 или ASTM D1881
10	Набухание резины, %, не более	5	1,5	П. 8.9
11	Водородный показатель (pH) при 20°C	7,5 - 11	9,22	П. 8.10 или ASTM D1287
12	Щелочность, см ³ , не менее	2,0	20,06	П. 8.11 или ASTM D1121

Производитель: ООО "КСМ ПРОТЕК", Украина

Заключение: по проверенным показателям пробы Охлаждающая жидкость TEMOL Tosol A-40 соответствует требованиям ТУ У 20.5-30858281-009:2016 из.1

Гарантийный срок хранения - 5 лет со дня изготовления



Лаборант

Зав. Лаборатории

Дата выдачи паспорта 20.02.23р.

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CERTIFICATE OF ANALYSIS № 82

Motor Oil PROTEC HD 15W-40

TU U 19.2-37838186-002:2012, zm.1,2

Batch № 82

API CI-4/SL

Volvo VDS-2, Renault RD-2

Manufacturing date 08.02.24

Batch net weigh 2,597t

ACEA E7, A3/B4

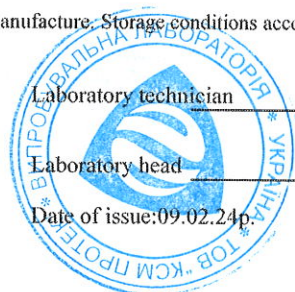
Product Characteristics

№	Characteristics and units	Standard limits	Actual	Test method
1	Kinematic viscosity at 100oC, cSt, in range	12,5 - 16,3	15,29	DSTU GOST 33 or ASTM D445
2	Viscosity Index, not lower than	120	156	DSTU GOST 25371 or ASTM D2270
3	Total base number, mg KOH per 1 g, not lower than	8,5	10,25	DSTU 5094 or ISO 3771 or ASTM D2896
4	Sulfated ash, %, not lower than	1,45	1,32	DSTU GOST 12417 or ASTM D874
5	Flash point (COC), °C, not lower than	219	217	DSTU GOST 4333 or ASTM D92
6	Pour point, °C, not more than	-27	-33	GOST 20287 or ASTM D97
7	Density at 20 °C, kg/m ³ , not more than	910	874	GOST 3900 or ASTM D1298
8	Mechanical impurities content, %, not more than	0,01	nil	DSTU GOST 6370 or ASTM D2273
9	Water content, %, not more than	nil	nil	DSTU GOST 2477 or ASTM D95
10	Calcium + magnesium in calcium weight, %, not lower than	0,28	0,382	GOST 13538 or ASTM D6443
11	Zinc weight, %, not lower than	0,09	0,111	GOST 13538 or ASTM D6443
12	Colour on colorimeter (15:85), not more than	3,0	1,5	GOST 20284 or ASTM D1500
13	Viscosity is dynamic at -20oC, cSt, not more than	7 000	6 800	GOST 1929 or ASTM D5293
14	Corrosion on plumbum plates (DK-NAMI), g/m ² , not more than	Pass	Pass	GOST 20502
15	Stabilization by inductive period of sedimentation (IPS), hours 50	Pass	Pass	DSTU GOST 11063

Manufactured by KSM PROTEC LLC, Ukraine

Conclusion: Motor Oil PROTEC HD 15W-40 sample satisfies the requirement of TU U 19.2-37838186-002:2012 zm.1,2 standard based on characteristics analyzed.

Shelf life - 5 years from date of manufacture. Storage conditions according to DSTU 4454.



Laboratory technician

Laboratory head

Date of issue: 09.02.24

CERTIFICATE OF ANALYSIS № 81

Motor Oil PROTEC HD 10W-40

TU U 19.2-37838186-002:2012, zm.1,2

Batch № 81

API CI-4/SL

Volvo VDS-2, Renault RD-2

Manufacturing date 08.02.24

Batch net weigh 2,597t

ACEA E7, A3/B4

Product Characteristics

№	Characteristics and units	Standard limits	Actual	Test method
1	Kinematic viscosity at 100oC, cSt, in range	12,5 - 16,3	15,29	DSTU GOST 33 or ASTM D445
2	Viscosity Index, not lower than	125	156	DSTU GOST 25371 or ASTM D2270
3	Total base number, mg KOH per 1 g, not lower than	8,5	10,25	DSTU 5094 or ISO 3771 or ASTM D2896
4	Sulfated ash, %, not lower than	1,45	1,15	DSTU GOST 12417 or ASTM D874
5	Flash point (COC), °C, not lower than	205	217	DSTU GOST 4333 or ASTM D92
6	Pour point, °C, not more than	-30	-33	GOST 20287 or ASTM D97
7	Density at 20 °C, kg/m3, not more than	910	874	GOST 3900 or ASTM D1298
8	Mechanical impurities content, %, not more than	0,01	nil	DSTU GOST 6370 or ASTM D2273
9	Water content, %, not more than	0,05	nil	DSTU GOST 2477 or ASTM D95
10	Calcium + magnesium in calcium weight, %, not lower than	0,28	0,382	GOST 13538 or ASTM D6443
11	Zinc weight, %, not lower than	0,09	0,111	GOST 13538 or ASTM D6443
12	Colour on colorimeter (15:85), not more than	3,0	1,5	GOST 20284 or ASTM D1500
13	Viscosity is dynamic at -25oC, cSt, not more than	7 000	6 700	GOST 1929 or ASTM D5293
14	Corrosion on plumbum plates (DK-NAMI), g/m2, not more than	Pass	Pass	GOST 20502
15	Stabilization by inductive period of sedimentation (IPS), hours 50	Pass	Pass	DSTU GOST 11063

Manufactured by KSM PROTEC LLC, Ukraine

Conclusion: Motor Oil PROTEC HD 10W-40 sample satisfies the requirement of TU U 19.2-37838186-002:2012 zm.1,2 standard based on characteristics analyzed.

Shelf life - 5 years from date of manufacture. Storage conditions according to DSTU 4454.



Laboratory technician

Laboratory head

Date of issue: 09.02.24p.

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

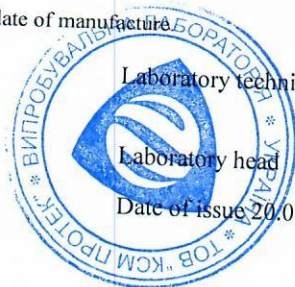
Product Characteristics

№	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, mr 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.