

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.: 2023111873
Date of issue: 17/11/2023

Test sample

Product: EUROTEC TRANSFORMER OIL T 1500
Date of sampling: 17/11/2023

Manufacture date: 17/11/2023
Batch number: 23111873
Tank ID: T61.1

Test result

Date of analysis: 17/11/2023

Parameters	Unit	Test result	Limit	Test method	Conclusion
Appearance	-	Bright & Clear	Bright & Clear	Visual	Pass
Kinematic viscosity -at 40°C -at 50°C -at 100°C	mm ² /s	10.47 7.60 2.56	Max. 8.0	ASTM D445	Pass
Water content	%	None	Max. 0.05	ASTM D95	Pass
Mechanical impurities	%	None	None	ASTM D 4807	Pass
Closed Cup Flash Point	°C	143	Min. 135	ASTM D93	Pass
Pour Point	°C	-45	Max. -45	ASTM D97	Pass
TAN	mg KOH/g	0.007	Max. 0.01	ASTM D974	Pass
Color	-	0.5	Max. 1.5	ASTM D1500	Pass
Dielectric dissipation factor at 90°C	%	0.20	Max. 0.50	IEC 60247	Pass
Dielectric Breakdown Voltage	kV	60.6	Min. 30	IEC 60156	Pass
Density at 20 °C	g/cm ³	0.8822	Max. 0.885	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.





Shell Corena S3 R 46

- Long Life
- Improved Efficiency

Premium Rotary Air Compressor Oil

Shell Corena S3 R is a premium quality air compressor oil designed to deliver high performance lubrication of rotary sliding vane and screw air compressors. It uses an advanced additive system to provide excellent protection and performance for compressors running with oil maintenance intervals of 4,000 hours and up to 6,000 hours under certain conditions.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

▪ Long oil life – Maintenance saving

Shell Corena S3 R is capable of providing oil maintenance intervals of 4,000 hours (where allowed by manufacturers) even when operating at maximum discharge temperatures of up to 100°C. This may be extended to up to 6,000 hours under certain conditions.

It is formulated to help:

- Resist formation of carbon deposits in sliding vane slots in vane compressors.
- Resist formation of deposits on rotating components in screw compressors.
- Resist thermal breakdown and deposit formation to maintain excellent internal surface cleanliness particularly in oil/air separator and coalescer systems.
- The exact oil maintenance interval will depend on intake air quality, duty cycle and ambient conditions. For hot and humid type climates as found in the Asian and Pacific regions, the lower oil drain period of 4,000hrs is recommended (also consult OEM recommendations).

▪ Outstanding wear protection

With many years of successful application, Shell Corena S3 R helps provide effective protection of internal metal surfaces from corrosion and wear.

It contains an advanced ashless anti-wear system to help prolong the life of critical parts such as bearings and gears.

▪ Maintaining system efficiency

Air release and prevention of foaming are critical performance characteristics in a compressor oil, ensuring reliable start-up and continuous compressed air availability. Shell Corena S3 R is designed to provide rapid air release without excessive foaming to give trouble-free operation even under cycling conditions.

In addition, Shell Corena S3 R has excellent water separation properties to help ensure continuous efficient operation of the compressor even in the presence of water.

Main Applications



▪ Rotary sliding vane and screw air compressors

Shell Corena S3 R is suitable for use in oil-flooded/ oil injected single or two-stage rotary vane or screw air compressors.

Specifications, Approvals & Recommendations

▪ ISO 6743-3:2003(E) L-DAJ

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.



MATERIAL SAFETY DATA SHEET

Regulation (EC) No 1907/2006 (REACH), Annex II
(COMMISSION REGULATION (EU) No 453/2010)

Version 1

Product Name Multi-purpose antirust lubricant

Issue Date 04-Sep-2014
Revision date 04-Sep-2014

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

1.1. Product identifier

Product Name Multi-purpose antirust lubricant
REACH registration number No information available

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

Recommended Use Anti-rust lubricant is a multi-functional product, featuring in anti-rust, penetration and remove rust, lubrication, dehumidification, cleaning and corrosion prevention, it can apply on automotive, industrial machinery and tools for removal of oil contaminant provide lubrication, anti-rust, corrosion prevention, and dehumidification. Besides it can apply on household and office appliance for the removal of loose rust and rust knot, provide lubrication and reduce noise with superior effect.

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier GUANGZHOU VESLEE CHEMICAL SCIENCE AND TECHNOLOGY CO.,LTD
Address Room 322-323,JINZHONG.MINGPINHUI Auto Accessory Plaza, No.36 Yongfu Road, Guangzhou, China
Postal Code 511365
Phone +86-20-37657898
FAX +86-20-82836999
E-mail veslee@veslee.com

1.4. Emergency telephone number

+86-20-37657898

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

LIQUID (Flammable liquid)Category1(H222)
Germ cell mutagenicity Category 1B - (H340)
Carcinogenicity Category 1B - (H350)
Reproductive Toxicity Category 2 - (H361)
Aspiration toxicity Category 1 - (H304)

Classification according to Directive 67/548/EEC or 1999/45/EC

Xn - Harmful
F+ - Extremely flammable
F+; R12
Carcinogenic, Category 1; R45
Mutagenic Category 2; R46
Xn; R65
Toxic for reproduction Category 3; R63

2.2. Label elements





Previous Name: Shell Albida Grease EMS 2

Shell Gadus S5 V100 2

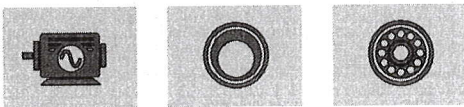
- Long Life
- Improved Efficiency
- Lithium Complex

Advanced Multipurpose Grease

Shell Gadus S5 V100 is a lithium complex grease based on synthetic base oils, containing antioxidants, EP-, wear- and rust preventing additives. The product contains a special friction modifier which is suitable for high speed bearings, taper roller bearings and cylindrical bearings, type NJ, NUP plus applications with an angle ring.

DESIGNED TO MEET CHALLENGES

Main Applications



Shell Gadus S5 V100 is developed for lubrication of roller bearings operating at high speeds as well as bearings submitted to severe cold. The grease has very low starting and running torques at temperatures down to -50°C and therefore suitable for all year lubrication of for example outdoor fans and electrical motors. The grease has a very good mechanical and thermal stability and can be used in electrical motors, fans and pumps at bearing temperatures up to 150°C where there is a demand for long re-lubrication intervals.

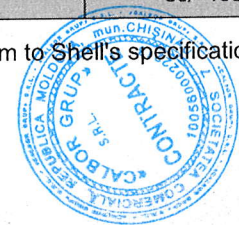
Specifications, Approvals & Recommendations

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties	Method	Shell Gadus S5 V100 2
NLGI Consistency		2
Penetration, worked 60 strokes (0.1 mm)	IP 50 / ASTM D217	265-295
Dropping Point °C	IP 396	260
Base Oil Viscosity @40°C cSt	IP 71 / ASTM D445	100
Base Oil Viscosity @100°C cSt	IP 71 / ASTM D445	14
Rust Preventing Properties : SKF Emcor distilled water		Pass
Rust Preventing Properties : SKF Emcor WWO distilled water		Pass
Lubricating Ability SKF R2F A		Pass
Lubricating Ability SKF R2F B @150°C		Pass
Mechanical Stability, Shell Roll (50 hrs) @80°C		+50
Temperature Range (temporarily) °C		-50/+150 (200)

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.





Certificate of analysis

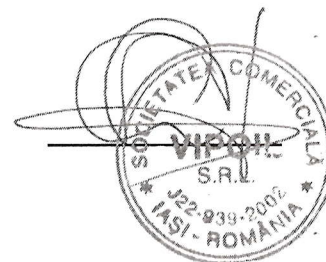
Certificate no.: **4205**
Product: **KS-19**
Date of issue: 08.03.2024

Batch no.: 43
Date of manufacture: 08.03.2024

Typical Characteristics

Name	Test method	Value
Appearance	VL-TA-P-051	Clear and Bright
Density @15°C, g/cm ³	ASTM D4052	0.8957
Kinematic viscosity @40°C, mm ² /s ⁻¹	ASTM D445	227.11
Kinematic viscosity @100°C, mm ² /s ⁻¹	ASTM D445	18.95
Viscosity index	ASTM D2270	94
Flash Point °C	ASTM D92	245
Pour Point °C	ASTM D97	-15
Color	ASTM D1500	4

Head of laboratory



PRODUCT DESCRIPTION



LUBRICANTS
COMPANY

Rev. 2023

Vipoil TransROil 80W-90 GL-5

Ulei de transmisie

DESCRIEREA PRODUSULUI

VIPOIL TransROil 80W-90 API GL-5 este obținut din uleiuri minerale de calitate superioară cu cele mai noi tehnologii de aditivare care asigură nivelul de performanță API GL-5 .

SPECIFICATII

API GL-5
SAE 80W-90
API MT-1
MIL-L-2105D
ZF-TE-ML 07A/08
ZF-TE-ML 02B/05A/12L/16B/17H/19B/21A

APLICATII

VIPOIL TransROil 80W-90 API GL-5 este recomandat pentru a fi utilizat în transmisii mecanice, transmisii hipoide a autovehiculelor, camioanelor, utilajelor agricole pentru care se recomandă utilizarea unui lubrifianț de extremă presiune, ce asigură funcționarea acestora în condiții severe de lucru pentru care producătorul recomandă un ulei cu nivelul de performanță API GL-5 .

BENEFICII

- Stabilitate foarte bună la oxidare
- Rezistența la spumare
- Demulsionare excelentă
- Proprietăți:
 - anti-uzura,
 - anticoroziune
 - antioxidanți,
 - antispumant.

PROPRIETATI SPECIFICE

CARACTERISTICI	METODA	VALOARE
Densitate la 15°C, g/cm ³ , max.	ASTM D4052	0.890
Vascozitate cinematica at +40°C, mm ² /s ⁻¹ .	ASTM D445	150.0
Vascozitate cinematica at +100°C, mm ² /s ⁻¹ .	ASTM D445	15.0
Indice de vascozitate, min.	ASTM D2270	94
Punct de aprindere °C, min.	ASTM D92	245
Punct de curgere °C, min.	ASTM D97	-30
Demulsifiere. at +52 °C, min	DIN 51599	<30

* These values are informative. Variations of these characteristics may occur.

This lubricant does not present a particular danger if it is used according to our recommendations and according to the purpose for which it was produced. The security sheet according to the European legislation in force can be obtained on request.





SAFETY DATA SHEET

according to Commission Regulation (EC) No 1907/2006,
Article 31, Annex II as amended

Page 7 of 13
Version / Revision: 1/-
Date: 20.06.2022.
Date of previous issue: -

G-ENERGY ANTIFREEZE SF12+ 40

Odour:	mild
Odour threshold:	not determined
pH:	8.5 (ASTM D1287)
Melting point/freezing point:	freezing point: $\leq -37^{\circ}\text{C}$ (ASTM D1177)
Boiling point/boiling range	$\geq 108^{\circ}\text{C}$ (ASTM D1120)
Flash point:	not determined
Evaporation rate:	not determined
Flammability (solid, gas):	not applicable (liquid)
Upper/lower ignition or explosion limit:	not determined, 1.8% – 12.8% for ethylene glycol
Vapour pressure:	not determined
Vapour density:	not determined
Relative density:	1071 kg/m ³ at 20°C (ASTM D5931)
Solubility:	soluble in water
Partition coefficient: n-octanol/water:	not available
Autoignition temperature:	not determined
Thermal decomposition:	not determined
Viscosity:	not determined
Explosive properties:	not explosive
Oxidizing properties:	not oxidising

9.2. Other information

No data available.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

No reactivity hazard is expected under recommended handling and storage conditions.

10.2 Chemical stability

Stable under recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under recommended handling and storage conditions.

10.4. Conditions to avoid

Avoid exposure to high temperatures, open flame, sparks, and other ignition sources, storing with incompatible substances.





Certificate of analysis

Certificate no.: **1358**
Product: **I-20**
Date of issue: 14.09.2023

Batch no.: **172**
Date of manufacture: 14.09.2023

Typical Characteristics

Name	Test method	Value
Appearance	VL-TA-P-051	Clear and Bright
Density @15°C, g/cm ³	ASTM D4052	0.8729
Kinematic viscosity @40°C, mm ² /s ⁻¹	ASTM D445	30.71
Kinematic viscosity @100°C, mm ² /s ⁻¹	ASTM D445	5.23
Viscosity index	ASTM D2270	100
Flash Point °C	ASTM D92	225
Pour Point °C	ASTM D97	-12
Color	ASTM D1500	1.5
TBN mg KOH/g	ASTM D2896	0.8

Head of laboratory





Certificate of analysis

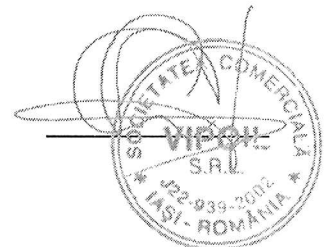
Certificate no.: **531**
Product: **MotoROil M-8B**
Date of issue: 20.04.2023

Batch no.: **71**
Date of manufacture: 20.04.2023

Typical Characteristics

Name	Test method	Value
Appearance	VL-TA-P-051	Clear and Bright
Density @15°C, g/cm ³	ASTM D4052	0.8835
Kinematic viscosity @40°C, mm ² /s ⁻¹	ASTM D445	62.70
Kinematic viscosity @100°C, mm ² /s ⁻¹	ASTM D445	8.44
Viscosity index	ASTM D2270	104
Flash Point °C	ASTM D92	225
Pour Point °C	ASTM D97	-30
Color	ASTM D1500	2.5
TBN mg KOH/g	ASTM D2896	5.5

Head of laboratory





Информация о продукте

gleitmo® 585 K

Описание

gleitmo 585 K - это высококачественная литиевая смазка на базе синтетического масла. Она содержит комбинацию твердых белых смазочных материалов, которые смягчают ударные нагрузки и снижают износ.

gleitmo 585 K помогает предотвратить фреттинг-коррозию и может использоваться с длительными интервалами замены.

Область применения

gleitmo 585 K может использоваться во всех типах точек смазки, к которым предъявляются особенно строгие требования. Например, в точках, где есть опасность возникновения фреттинг-коррозии вследствие вибраций и колебательных движений.

Благодаря светлому цвету gleitmo 585 K также используется в производствах с высокими требованиями к чистоте: пищевой, текстильной и бумажной промышленности, а также в упаковочных и разливающих линиях.

Метод нанесения

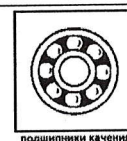
Подшипники качения: заполнить свободное пространство в подшипнике и его кожухе на 30-50%, поскольку при большом количестве смазки при высоких скоростях вращения наблюдается заметный рост температуры. В случае подшипников, которые вращаются с очень низкими скоростями, но должны быть надежно защищены от коррозии, кожух может заполняться смазкой полностью. gleitmo 585 K может прокачиваться через автоматические смазочные системы. Не следует смешивать gleitmo 585 K со смазками с другими загустителями.

Смазка с белыми смазочными материалами для сильно нагруженных узлов

- Температурный диапазон: -45 / +130°C
- Прекрасная защита от износа в случае ударных нагрузок и колебательного движения
- Уменьшает фреттинг-коррозию
- Обеспечивает надежную защиту от коррозии
- Длительные интервалы замены
- Высокая стойкость к старению
- Обеспечивает надежную работу сильно нагруженного оборудования

Типовые характеристики

Свойства	Значение	Единица	Метод
Классификация	KPFC2K-40		DIN 51502
Цвет	бежевый		
Температурный диапазон	-45 / +130	°C	DIN 51825
Базовое масло	синтетич.		
Загуститель	Li		
Наполнитель	белый		
Вязкость базового масла при 40°C	50	мм ² /с	DIN 51 562-1
Рабочая стабильность, уменьшение пенетрации после: 100 000 циклов	не более 40	1/10 мм	
Класс NLGI	2		DIN 51 818
Стабильность против окисления (перепад давления)	< 0,30	бар	DIN 51 808
Содержание воды	< 0,1	%	DIN ISO 3733
Температура каплепадения	≥ 180	°C	DIN ISO 2176
Стойкость к воде	0-90	баллы	DIN 51 807-1
Коллоидная стабильность, 40°C, 7 ч	3	%	DIN 51 817
Давление течения при -40°C	1100	гПа	DIN 51 805
Коррозия медной пластины	1	баллы	DIN 51 811
Коррозионный тест EMCOR (дистиллированная вода)	0-0	баллы	DIN 51 802
Тест FAG FE 8 (n=7,5 мин ⁻¹ , F=80кН)	mw10=0,4, mw50=0,6	мг	E DIN 51 819
Оценка испытания	очень хорошо		
Тест FAG-FE 9 A/1500/6000-130	F50 >200	часы	DIN 51 821
Значение DN (n x dm)	500000	мм/мин.	



подшипники качения



подшипники скольжения

Представленные данные являются типовыми на момент составления описания. Компания сохраняет за собой право вносить изменения. Приведенные данные характеризуются повторяемостью и воспроизводимостью при применении соответствующих методов испытаний. Более подробную информацию о продукте и его использовании можно получить у технических специалистов компании:

ОО Фукс Ойл
15252, РФ, Москва, ул. Авиастроителя Микояна, д. 12
тл. (+7 495) 961 27 41
факс (+7 495) 961 01 90
E-mail: info@fuchs-oil.ru

Fuchs Lubritech GmbH
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Tel. (+49 63 74) 9 24-7 30
Fax (+49 63 74) 9 24-9 43
info@fuchs-lubritech.de

Product Information

LUBRICANTS.
TECHNOLOGY.
PEOPLE.



CHARACTERISTICS: RENOLIT EP GREASES

Characteristics	Unit	RENOLIT					Test Method
		EP 000	EP 00	EP 0	EP 1	EP 2	
Colour		Translucent brown					
Texture		Smooth					
Thickening agent		Lithium soap					
Drop point	°C	Not Applicable	177 min.	182 min.	177 min.	ISO2176	
Worked penetration	1/10 mm	445-475	400-430	355-385	310-340	265-295	ISO2137
DIN Classification		KP 000 K-30	KP 00 K-30	KP 0 K-30	KP 1 K-30	KP 2 K-20	DIN 51 825
ISO Classification		L-XBBEB 000	L-XBBEB 00	L-XCBEB 0	L-XCCEB 1	L-XBCEB 2	ISO 6743-9
NLGI grade		000	00	0	1	2	
Water content	%wt	0.2 max.					IP74
Acidity on base grease as oleic	%wt	0.2 max.					IP37
Alkalinity on base grease as LiOH	%wt	0.2 max.					IP37
Oil separation 7 days at 40°C	%wt	Not Applicable		9.0	7.0 max.	IP121	
Oxidation stability maximum pressure drop 100 hours	bar	0.7					IP142
Dynamic anti-rust test distilled water		Not Applicable		0,0	0,0	IP220	
Copper corrosion 24 hr at 40°C		Passes					IP112
4 ball weld load	N	2453					IP239
Sphere of use	°C	-30 to +100	-30 to +100	-30 to +110	-30 to +120	-25 to +130	

Fluid Component

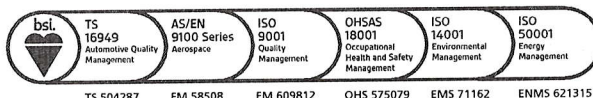
Type	Highly refined mineral oil						
Kinematic viscosity							ISO3104
at 40°C	mm ² /s	230.0	230.0	230.0	230.0	230.0	
at 100°C	mm ² /s	17.50	17.50	17.50	17.50	17.50	



April 2013 GDUK Page 2 of 2

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Fax +44-1782 -20 20 73
contact-uk@fuchs-oil.com



TS 504287 FM 58508 FM 609812 OHS 575079 EMS 71162 ENMS 621315

Health, Safety and Environment - Information is provided for products in the relevant Safety Data Sheet. This provides guidance on potential hazards, precautions and first-aid measures, together with environmental effects and disposal of used products.

While the information and figures given here are typical of current production and conform to specification, minor variations may occur. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the products

Vipoil HidROil Hidro R

Ulei hidraulic

DESCRIERE

Vipoil HidROil Hidro R este un ulei hidraulic cu un nivel ridicat nivel de performanță. Este produs din petrol foarte rafinat uleiuri de bază și aditivi multifuncționali cu îmbunătățiri filtrabilitate, anti-oxidant, anticoroziune, anti-uzură, deprimant, proprietăți demulsionante și anti-spumă.

APLICATII

Vipoil HidROil Hidro R este destinat utilizării în sistemele hidraulice ale echipamentelor industriale funcționează sub sarcini mecanice și termice mari, echipate cu unități servo-hidraulice, sisteme de control proporțional Uleiurile hidraulice HLP îndeplinesc cerințele DIN 51524-2. Acestea îndeplinesc cerințele de performanță ale celor mai multe sisteme hidraulice. Ele pot fi folosite în sisteme hidraulice ale echipamentelor mobile.

SPECIFICATII

ISO VG 22
DIN 51524-2 HLP
ISO 11158 HM
Denison HF-0, HF-1, HF-2;

BENEFICII

- Stabilitate foarte bună la oxidare
- Rezistența la spumare
- Demulsionare excelentă
- Proprietăți:
 - anti-uzura,
 - anticoroziune
 - antioxidanti,
 - antispumant.

PROPRIETATI

Caracteristici	Metoda test	Valori
Densitate la 15°C, g/cm ³ , max.	ASTM D4052	0.860
Viscozitate cinematica la +40°C, mm ² /s ⁻¹ .	ASTM D445	20.5
Viscozitate cinematica la +100°C, mm ² /s ⁻¹ .	ASTM D445	4.3
Indice de viscozitate, min.	ASTM D2270	117
Punct de inflamabilitate °C, min.	ASTM D92	200
Punct de curgere °C, min.	ASTM D97	-45
Demulsibilitate la +52 °C, min	DIN 51599	<30

* These values are informative. Variations of these characteristics may occur.

This lubricant does not present a particular danger if it is used according to our recommendations and according to the purpose for which it was produced. The security sheet according to the European legislation in force can be obtained on request.



Vipoil CaROil Grafitata

Unsoare pe baza de calciu cu grafit

PRODUCT DESCRIPTION

VIPOIL CaROil Grafitata este o unsoare pe bază de săpun de calciu cu adaos de grafit pana la 10% prevăzut pentru gresarea mecanismelor grele, cu sarcină (transmișilor de roată deschise, uniriilor de filet, șuruburilor mobile, arcurilor, cricurilor ș.a.).

APPLICATIONS

Este destinată alimentării nodurilor de frecare demontabile care funcționează în intervalul de temperaturi de la -25°C până la +65°C și nodurilor de frecare cu ajutorul injectorilor de unsoare manuali la temperaturi de până la -25°C.

SPECIFICATIONS

DIN 51502 K2G-25

NLGI 2

ISO 6743-9 L-XBAHA 2

BENEFITS

- Stabilitate mecanica foarte buna
- Rezistență foarte bună la oxidare și coroziune.

TYPICAL PROPERTIES

Characteristics	Test Method	Value
Aspect fizic	Vizual	Unsoare omogena, negru
Penetratie la 25°C, 10 ⁻¹ mm	ASTM D217	265 - 295
Punct de picurare, °C, max.	ASTM D566	>90
Consistenta NLGI	ASTM D217	2

* These values are informative. Variations of these characteristics may occur.

This lubricant does not present a particular danger if it is used according to our recommendations and according to the purpose for which it was produced. The security sheet according to the European legislation in force can be obtained on request.





Certificate of Conformity

No. 1061/A / 02.06.2023

This is to confirm "HEXOL LI EP2 Complex Blue Longlife"
 Has been fomulated with accordance to the specification: ISO 6743-9: L-XCDEB 2, NLGI-2,
 DIN 51502: KP2N-30
 And manufactured by SC Hexol Lube SRL

Batch Number: 1/02.06.2023

Quantity: 150 x 4 Kg Bucket

Total: 600 Kg

Test Results and Characteristics

Characteristics	Unit	Specification	Measured value	Method
Appearance		blue	blue	Visual
Dropping point	°C	min. 260	265	ASTM D 445
Penetration after 60 strokes at 25°C	0.1mm	260 - 290	280	ASTM D 445
Corrosive effect on metals		pass	pass	STAS 55-81
Mass fraction of water	%	max. 0.06	0.03	STAS 35-81

We declare that the product specified above are accordind with the specifications.

Do not modify or alterate this certificate.

Issued to
CALBOR GRUP SRL
CHISINAU
REPUBLICA MOLDOVA

Quality and Environmental Compliance Manager

Ing. Ilinca Rotaru



PRODUCT DESCRIPTION



LUBRICANTS
COMPANY

Rev. 2023

Vipoil LiROil LITOL-24

Unsoare pe baza de litiu

PRODUCT DESCRIPTION

VIPOIL LiROil Litol-24 este o unsoare pe bază de săpun de litiu, multifuncțională de antifricțiune, rezistentă la apă, prevăzută pentru utilizarea în nodurile de frecare ale mecanismelor navale grele cu destinație diversă ce funcționează în intervalul de -30°C până la +130°C.

SPECIFICATIONS

DIN 51502 K3K-30

APPLICATIONS

Este destinată lubrifierii nodurilor de frecare a vehiculelor cu roți și șenile, utilajelor industriale și mecanismelor navale grele cu destinație diversă ce funcționează în intervalul de temperatură -30°C până la +130°C.

BENEFITS

- Proprietăți excelente de ungere.
- Durată extinsă de utilizare.
- Rezistență foarte bună la oxidare și coroziune.

TYPICAL PROPERTIES

Characteristics	Test Method	Value
Aspect fizic	Vizual	Unsoare omogena, brun
Penetrație la 25°C, 10 ⁻¹ mm	ASTM D217	220 - 250
Punct de picurare, °C, max.	ASTM D566	>190
Consistența NLGI	ASTM D217	3

* These values are informative. Variations of these characteristics may occur.

This lubricant does not present a particular danger if it is used according to our recommendations and according to the purpose for which it was produced. The security sheet according to the European legislation in force can be obtained on request.





HEXOL CA G2 OPTIMUM UNSOARE

DESCRIERE PRODUS

HEXOL CA G2 Optimum este o unsoare pe bază de calciu, fabricată prin condensarea uleiurilor de bază minerale cu săpun de calciu a acizilor liposolubili și adăugarea de 10% grafit, destinată reducerii uzurii la suprafețele în fricțiune. Asigură o excelentă rezistență la apă și o bună protecție împotriva coroziunii și uzurii în diverse aplicații în condiții de lucru situate în intervalul de temperaturi -20°C și +60°C.

CARACTERISTICI

- corespunde specificației ISO 6743-9: L-XBAHA 2; DIN 51502: K2C-25; NLGI-2;
- formulată special pentru a asigura o foarte bună rezistență la spălarea cu apă;
- are o mare afinitate cu metalele asigurând o bună protecție a suprafețelor rulmenților împotriva uzurii și coroziunii chiar și atunci când unsoarea este contaminată cu apă;
- datorită coeficientului scăzut de fricțiune a grafitului din compoziție conferă o mai bună rezistență antifrecare pe suprafața metalului;
- nu conține componente toxice.

DOMENIU DE UTILIZARE

- special recomandată pentru lagăre de alunecare și rulmenți operate la viteze mari;
- echipamente industriale și mașini agricole echipate cu puncte de gresare, unde producatorul recomandă utilizarea unei unsori din această categorie;
- rulmenți cu bile și role utilizați în aplicații cu viteze și încărcări mari.

PROPRIETĂȚI SPECIFICE

Aspect	negru, omogen
Vâscozitate ulei de bază la 40°C [mm ² /s]	46
Punct de picurare [°C]	95
Penetrație 60 St. la 25°C [0,1 mm]	275
Coroziune la 60°C / 3 h (copper) [grade]	1b

AMBALAJ

- | | | | | | | |
|---|---|---|--|---|--|--------------------------------|
| <input checked="" type="checkbox"/> 0.4Kg | <input checked="" type="checkbox"/> 1Kg | <input checked="" type="checkbox"/> 4Kg | <input checked="" type="checkbox"/> 15Kg | <input checked="" type="checkbox"/> 180Kg | <input type="checkbox"/> 1L | <input type="checkbox"/> 3L |
| <input type="checkbox"/> 0.23L | <input type="checkbox"/> 0.45L | <input type="checkbox"/> 0.5L | <input type="checkbox"/> 0.6L | <input type="checkbox"/> 0.9L | <input checked="" type="checkbox"/> 208L | <input type="checkbox"/> 1000L |
| <input type="checkbox"/> 4L | <input type="checkbox"/> 5L | <input type="checkbox"/> 10L | <input type="checkbox"/> 20L | <input type="checkbox"/> 60L | | |



Vipoil Unsoare U 1-13

Unsoare pe baza de litiu

DESCRIERE PRODUSE

VIPOIL Unsoare U 1-13 este o unsoare pe bază de săpun de litiu, multifuncțională de antifricțiune, rezistentă la apă, prevăzută pentru utilizarea în nodurile de frecare ale mecanismelor navale grele cu destinație diversă ce funcționează în intervalul de -30°C până la $+130^{\circ}\text{C}$.

SPECIFICATII

DIN 51502 K3K-30

APLICATII

Este destinată lubrifierii nodurilor de frecare a vehiculelor cu roți și șenile, utilajelor industriale și mecanismelor navale grele cu destinație diversă ce funcționează în intervalul de temperatură -30°C până la $+130^{\circ}\text{C}$.

BENEFICII

- Proprietăți excelente de ungere.
- Durată extinsă de utilizare.
- Rezistență foarte bună la oxidare și coroziune.

PROPRIETATI

Caracteristici	Metoda test	Valori
Aspect fizic	Vizual	Unsoare omogena, brun
Penetrație la 25°C , 10^{-1}mm	ASTM D217	220 - 250
Punct de picurare, $^{\circ}\text{C}$, max.	ASTM D566	>190
Consistența NLGI	ASTM D217	3

* These values are informative. Variations of these characteristics may occur.

This lubricant does not present a particular danger if it is used according to our recommendations and according to the purpose for which it was produced. The security sheet according to the European legislation in force can be obtained on request.





Certificate of analysis

Certificate no.: **815**

Product: **I-40**

Date of issue: 13.06.2023

Batch no.: **106**

Date of manufacture: 13.06.2023

Typical Characteristics

Name	Test method	Value
Appearance	VL-TA-P-051	Clear and Bright
Density @15°C, g/cm ³	ASTM D4052	0.8831
Kinematic viscosity @40°C, mm ² /s ⁻¹	ASTM D445	65.45
Kinematic viscosity @100°C, mm ² /s ⁻¹	ASTM D445	8.47
Viscosity index	ASTM D2270	99
Flash Point °C	ASTM D92	225
Pour Point °C	ASTM D97	-12
Color	ASTM D1500	2.5
TBN mg KOH/g	ASTM D2896	0.8

Head of laboratory

