



Un Lok 2000

Food-grade anti-seize and lubricating compound



Protects metal up to 1260°C



- NSF H1 approved for use in food processing areas
- Reduces friction and wear (4 ball weld load: 500kg)
- Decreases parts damage
- Makes tighter joints possible
- Resists water washout

PROBLEM SOLUTION

Need for food-grade lubricant

UN LOK 2000 is NSF H1 approved for food-grade applications where incidental contact is possible.

Heavy loads

UN LOK 2000 remains in place, even under extreme pressure; it has a 4 ball weld load test of 500kg.

Lubricants that contain potentially harmful metallic particles

UN LOK 2000 contains no metallic particles, reduces risk of corrosion, better for the user.

Lubricants that stain

UN LOK 2000 is a clean, white substance that is non-staining.

Need for tight seals on lubricated parts

UN LOK 2000 acts as a sealant by reducing friction so tighter joints are possible.

Un Lok 2000

Food-grade anti-seize and lubricating compound

APPLICATION AREAS:

- Food industry
- Automotive
- Industrial
- Construction
- Diesel fleets
- Farms
- Marine
- Chemical industry



TECHNICAL SPECIFICATIONS

Colour	White
Film thickness	12 microns and up
Specific gravity at 25° C	0.95
Unworked penetration	330-360
Worked penetration (60 strokes at 25° C)	330-360
Difference in penetration after 100,000 strokes/max	3%
NLGI	0/1
Four ball wear/mm	0.55
Four ball weld load/kg	500kg
Solubility in water	Nil
Rust test rating	1
Copper corrosion 24 hours at 100° C	1b

* Consult the label for full instructions and precautions before using this product.



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LOK-CEASE 20/20

High Temperature Anti-Seize Lubricant

- HIGH TEMPERATURE - CONTAINS SPECIAL ADDITIVE TO WITHSTAND SUSTAINED HEAT OF UP 1204°C
- CUTS REPLACEMENT COSTS - REDUCES SEIZURE, CORROSION,
- PITTING, RUSTING, AND GALLING OF METAL PARTS.
- ACTS AS A SEALANT - REDUCES FRICTION AND TIGHTENS ALL
- JOINTS. DOES NOT EVAPORATE, SEPARATE OR HARDEN AND FUSE TO METALS.

FEATURES AND BENEFITS

- Allows for easy disassembly without damaging gaskets
- Withstands sustained temperatures up to 1204°C
- Restores threads without special equipment
- Will not harden, melt or evaporate

AREAS OF USE

- Speedometer cables
- Engine fittings and fasteners
- Press fit assemblies
- Shut-off valves
- Boiler fittings
- Pins, bolts and nuts
- Studs, pipes and joints
- Cap screws and housings
- Rubber hose connections
- Brake shoes
- Clutch housings
- Studs, pipes and joints
- Cap screws and housings
- Rubber hose connections
- Clutch housings

APPLICATION

- Automotive
- Industrial plants
- Construction equipments
- Steel Mills
- Ship yards
- Schools
- Trucking firms
- Utilities
- Warehouses

TECHNICAL DATA

Base	Calcium Carbonate + zinc oxide
Temperature Range	Up to 1260°C
Pressure Range	Up to 3,000 psi
Does not contain	Lead, silicone or Moly

Check the label for full instructions and precautions before using this product.
Do not use around liquid oxygen.
Do not use in areas where it will contact fluorinated compounds like Teflon.
PPPP

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LOK CEASE

噴霧式高溫高壓防卡潤滑混合劑

- 高溫 — 含有特殊添加劑以耐受高達1204°C至1260°C之持續熱
- 削減替換成本 — 減少金屬零件的黏結、腐蝕、斑蝕、生銹及磨蝕
- 作為密封劑 — 減少磨擦及緊固所有接頭、不會蒸發、分離或硬化及熔融至金屬
- 防水防酸 — 提供長期保護
- 可用於室內及室外的應用

特徵及優點

- 可在不損壞墊片或墊圈情況下輕易地拆卸
- 耐受高達1204°C至1260°C之持續溫度
- 不需特殊設備下復原線紋
- 不會硬化、融化或蒸發
- 抗水沖洗、鹽霧、蒸氣及風化
- 適用於可能偶發食品接觸的食品級應用

使用區域

- 水泥車
- 堆高車
- 保齡球館
- 包裝工廠
- 醫院工務單位
- 辦公大樓工務單位
- 商場工務單位
- 地方政府工務部門

應用範圍

- 輸送機
- 壓配件
- 導件及滑件
- 滑動軸承
- 滑輪及捲軸
- 鑽床
- 模具及凸輪
- 縫紉機

技術資料

- * 使用本產品前請參照標籤上完整的說明及注意事項。
- * 如需更多的技術資訊，請參閱本產品之安全資料表。
- * 備註：不可用在會接觸氟化合物之區域
- * 備註：不可用在會接觸氫化合物之區域
- * 例如：Teflon™、PFPE等。
- * 不可在液態氧周圍使用。
- * 施用前移除所有舊的防卡化合物。

基底	碳酸鈣+ 氧化鋅
溫度範圍	高達1260°C
壓力範圍	高達3,000 PSI
不含	鉛、聚矽氧或鉬

SAFETY DATA SHEET

UN LOK 2000, THREAD EZE ULTRA
According to EC Regulation 1907/2006/EC - revision 2015/830

Revision No. 3.1

Print Date 11/06/2017

Creation Date 02/02/2015

Revision Date 30/05/2017

SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Product Name UN LOK 2000, THREAD EZE ULTRA
Product Code 0762GU2 (CLP)

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

Recommended use

Lubricant.

1.3. Details of the supplier of the safety data sheet

NCH Distribution s.r.o.
Průmyslová 1190
410 02 Lovosice
Czech Republic
Tel.: +420 416 429 111

E-mail address chemcz@nch.com
Website address www.flexfill.cz

1.4. Emergency telephone number

Toxikologické informační středisko (TIS), Na Bojišti 1, 128 08 Praha 2, Czech Republic
Tel: +420 224 919 293 or +420 224 915 402 (24 Hours, consultation in Czech language only)

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

Aquatic chronic: Category 2
H411 - Toxic to aquatic life with long lasting effects

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Hazard pictograms



Hazard Statements

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements

P273 - Avoid release to the environment
P391 - Collect spillage
For industrial and institutional use only.
Keep out of reach of children.

2.3. Other hazards

No additional hazards identified.

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

3.2 Mixture

Component	CAS-No.	EC No.	EU - REACH reg number	Weight percent	EU - GHS/CLP Classification	Notes
VERY HIGHLY REFINED HYDROCARBON MINERAL OIL	8042-47-5	232-455-8	01-2119487078-27	50 - < 100	-	
CALCIUM CARBONATE	471-34-1	207-439-9	01-2119486795-18	25 - < 50	-	
ZINC OXIDE	1314-13-2	215-222-5	01-2119463881-32	10 - < 20	Aquatic Acute 1 (H400)	

Aquatic Chronic 1 (H410)

This mixture contains substances with a Community workplace exposure limit. For any H statements mentioned in this section, see the full text in section 16. The GHS/CLP classification for substances are listed once they have been harmonised according to the REACH Regulation No 1907 / 2006.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

Get medical attention immediately if symptoms occur.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Do not use solvents or thinners. If skin irritation persists, call a physician. Get medical attention if irritation develops and persists.

Ingestion

Do NOT induce vomiting. Rinse mouth with water. If swallowed, seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed

Sensitisation

No information available.

Eye contact

May cause irritation as itching and redness.

Skin contact

May cause irritation as itching or redness.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use: Foam. Carbon dioxide (CO2). Dry powder. Water spray. Alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

Water jet.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours. Possibility of harm to the aquatic life. Avoid release into the environment.

5.3. Advice for firefighters

Firefighters should wear a self-contained breathing apparatus and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

6.2. Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Insoluble in water and hence will float on the surface. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up

Methods for Containment

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). If using a cloth to wipe up a small spillage, properly dispose of the used cloth to avoid a fire risk.

Methods for Cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

Refer to sections 7, 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container.

7.3. Specific end use(s)

No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

TWA (8hrs): 5mg/m³ / STEL(15mins):10mg/m³. If vapours, fumes or mists are generated, their concentration in the workplace area should be kept to the lowest reasonable level. For substances.

Component	European Union	Czech	Slovakia	Poland	Hungary
VERY HIGHLY REFINED HYDROCARBON MINERAL OIL		PEL: 5mg/m ³ NPK-P: 10mg/m ³	5ppm NPEL 1mg/m ³ NPEL 5mg/m ³ NPEL	NDS: 5 mg/m ³	
CALCIUM CARBONATE		PEL: 10.0mg/m ³	10mg/m ³ NPEL	NDS: 10 mg/m ³	ÁK-érték: 10 mg/m ³
ZINC OXIDE		PEL: 2mg/m ³ NPK-P: 5mg/m ³	hranicny 1mg/m ³ 1mg/m ³ NPEL	NDSch: 10 mg/m ³ NDS: 5 mg/m ³	CK-érték: 20 mg/m ³ ÁK-érték: 5 mg/m ³

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Use personal protection equipment as per Directive 89/686/EEC.

Respiratory Protection

If excessive mist formation is likely wear suitable respiratory protection. Conforming to EN 143 eg P2 / P3 Particle filters.

Hand Protection

Wear suitable protective gloves conforming to EN 374. Type of gloves suggested :. Neoprene gloves (0.4 mm). Nitrile rubber (0.4 mm). Solvent-resistant gloves (butyl-rubber). For break through times, refer to glove manufacturers recommendations.

Eye Protection

Safety glasses if the method of use presents the likelihood of eye contact. Approved to EN 166.

General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of workday.

Environmental exposure controls

Local authorities should be advised if significant spillages cannot be contained.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Information below relates to typical values and does not constitute a specification.

Appearance	White	Specific Gravity	0.95
Physical State	Grease	Solubility	Insoluble in water
Odour	Hydrocarbon	Autoignition Temperature	> 280 °C
pH	Not applicable.	Viscosity	Viscous
Melting Point/Range	No information available.	Explosive properties	No information available
Boiling Point/Range	> 250 °C	Oxidizing Properties	No information available.
Flash Point	> 200 °C	VOC Content (%)	0 %
Method	Closed cup		
Evaporation Rate	No information available.		
Flammability Limits in Air %	No information available.		
Vapour Pressure	No information available.		
Vapor Density	No information available.		

9.2. Other information

No other information available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Not considered as highly reactive. See further information below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use.

10.4. Conditions to avoid

No conditions to be specially mentioned.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

None under normal storage conditions and use.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**Product Information

The product itself has not been tested.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
VERY HIGHLY REFINED HYDROCARBON MINERAL OIL	> 5000 mg/kg (Rat)		= 2062 ppm (Rat) 4 h
CALCIUM CARBONATE	= 6450 mg/kg (Rat)		
ZINC OXIDE	> 5000 mg/kg (Rat)		

Sensitisation

No information available.

Skin contact

May cause irritation as itching or redness.

Eye contact

May cause irritation as itching and redness.

Carcinogenicity

There are no known carcinogenic substances in this product.

Mutagenic Effects

There are no known mutagenic substances in this product.

Reproductive Effects

There are no known substances in this product with effects on reproduction.

SECTION 12. ECOLOGICAL INFORMATION**12.1. Toxicity**Product Information

The product itself has not been tested.

Ecotoxicity effects

Contains substance(s) known to be hazardous to the aquatic environment.

Component	Toxicity to Fish	Water Flea	Toxicity to Algae
VERY HIGHLY REFINED HYDROCARBON MINERAL OIL	LC50 > 10000 mg/L Lepomis macrochirus 96 h		
ZINC OXIDE	LC50 = 0.14 mg/L	EC50 = 0.07 mg/L	EC50 = 0.14 mg/L

12.2. Persistence and degradability

Persistence and degradability are substance specific, no test data is available on the constituents of this mixture to degrade or persist in the environment, either through biodegradation or other processes, such as oxidation or hydrolysis.

12.3. Bioaccumulative potential

Component information below.

Component	log Pow
VERY HIGHLY REFINED HYDROCARBON MINERAL OIL	6.006

12.4. Mobility in soil

The product is insoluble and floats on water.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

12.6. Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal. Empty remaining contents. Recycle according to official regulations.

EWC waste disposal No

The following EWC/ AVV waste codes may be applicable: 13 02 05* Mineral-based non-chlorinated engine, gear and lubricating oils.

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

SECTION 14. TRANSPORT INFORMATION**14.1, 14.2, 14.3, 14.4.**

IMDG/IMO

UN-No	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
Hazard Class	9
Packing Group	III
EmS	F-A, S-F

ADR / RID

UN-No	UN3082
Hazard Class	9
Packing Group	III
Classification Code	M6
Limited Quantity	5 L
Transport Cat. (Tunnel Restriction Code)	3 (E)

IATA/ICAO

UN-No	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s
Hazard Class	9
Packing Group	III
ERG Code	9L
Shipping Description	UN3082, Environmentally hazardous substance, liquid, n.o.s, 9, PG III

14.5. Environmental hazards

The mixture is environmentally hazardous for transport

Product is a marine pollutant according to the criteria set by IMDG/IMO

14.6. Special precautions for user

No special precautions.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Packaged product, not typically transported in IBC's.

Additional information

The above information is based on latest transport regulations i.e. ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

SECTION 15. REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.

WGK Classification

Water-endangering (WGK 2), Classification according VwVwS

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture by the supplier

SECTION 16. OTHER INFORMATION**Text of H statements mentioned in Section 3**

H400 - Very toxic to aquatic life. H410 - Very toxic to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Summation method. H411 - Toxic to aquatic life with long lasting effects.

Prepared By Austen Pimm

Creation Date 02/02/2015

Revision Date 30/05/2017

Revision summary

CLP update. SDS sections updated 2 15 3 16

Abbreviations

REACH: Registration Evaluation Authorisation Restriction of Chemicals

EU: European Union

EC: European community

EEC: European Economic Community

UN: United Nations

CAS: Chemical Abstracts Service

PBT: Persistent Bioaccumulative Toxic

vPvB: very Persistent very Bioaccumulative

LC50: Lethal concentration, 50 percent

LD50 : Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

LogPow: LogP octanol/water

VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)

WGK: Wassergefährdungsklasse (Water Hazard Class - Germany).

AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the international carriage of dangerous goods by road)

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International carriage of Dangerous goods by rail)

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

ERG: Emergency Response Guidebook

IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances

GHS: Globally Harmonised System of classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Chemical

w/w: weight for weight

DMSO: Dimethyl sulphoxide

OECD: Organization for Economic Cooperation and Development

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

Further Information

Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet