

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

1.1. Product identifier

Trade name: Lubricant 947

Chemical description: Product based on fatty acids derivatives.

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

Recommended use:

Industrial uses.

1.3. Details of the supplier of the safety data sheet

Supplier:

SIRIUS – ES Handels GmbH Bahnhofplatz 3, A-4600Wels Tel.: +43 (7242) 9396 5660, Fax: +43 (7242) 9396 5666

office@sirius-es.com, www.sirius-es.com

1.4. Emergency telephone number Tel.: +39 0331 715 111 - 24h

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008(CLP).

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

This product is not a hazardous article and need not be labelled according to EC-Directive 67/548, 1999/45 as amended.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

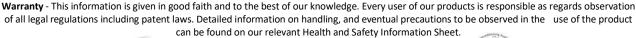
SECTION 3: Composition/information on ingredients

3.1. Substances

NΑ

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:







>= 5% - < 10% 2-(2-(2-butoxyethoxy)ethoxy)ethanol.

REACH No.: Not available, Index number: 603-183-00-0, CAS: 143-22-6, EC: 205-592-6

Xi; R41

3.3/1 Eye Dam. 1 H318

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. Seek immediately medical advice.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Not known.

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

Treatment:

Not known.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

Not known.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be donesafely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

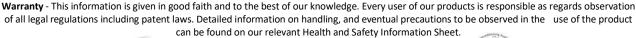
Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage







7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Instructions as regards storage premises:

Adequate ventilation in working area.

Packaging suggested:

Iron drums.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

2-[2-(2-butoxyethoxy)ethoxy]ethanol

Worker Industry: 195 mg/m3 - Worker Professional: 195 mg/m3 - General population: 117 mg/m3 -

Frequency: Long Term, systemic effects Human Inhalation

Worker Industry: 50 mg/kg - Worker Professional: 50 mg/kg - General population: 25 mg/kg -

Frequency: Long Term, systemic effects Human Dermal

General population: 2.5 mg/kg - Frequency: Long Term, systemic effects Human Oral

PNEC Exposure Limit Values

2-[2-(2-butoxyethoxy)ethoxy]ethanol

Fresh Water - Value: 1.5 mg/l Marine water - Value: 0.15 mg/l Intermittent release - Value: 5 mg/l

STP - Value: 200 mg/l

Freshwater sediments - Value: 5.77 mg/kg Marine water sediments - Value: 0.13 mg/kg

Soil (agricultural) - Value: 0.45 mg/kg Secondary poisoning - Value: 111 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles. (ref. EN 166, EN 140, EN175).

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVCor viton. (ref. EN 340).

Protection for hands:

Chemical-resistant protective gloves (EN 374). When prolonged or frequently repeated contact may occur, a glove is recommended to prevent contact. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). As general indication we suggest as suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): nitrile rubber (NBR; >= 0.4 mm thickness) and suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): nitrile rubber (NBR; >= 0.4 mm thickness). This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances-mixtures.

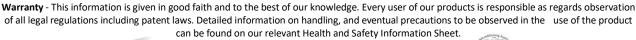
Respiratory protection:

Use adequate protective respiratory equipment. (ref. EN 136, EN 140, EN 141, EN 143, EN 149, EN 405).

Thermal Hazards:

None

Environmental exposure controls:







None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour:

Odour:

Odour threshold:

pH:

N.D.

Melting point / freezing point:

N.A.

Initial boiling point and boiling range: N.D.

Solid/gas flammability: N.D.

Upper/lower flammability or explosive limits: N.D.

Vapour density:

Flash point:

Evaporation rate:

Vapour pressure:

N.D.

N.D.

N.D.

Relative density: 0.90 - 0.94 Kg/l. Solubility in water: Dispersible. Solubility in oil: N.D.

Partition coefficient (n-octanol/water): N.D.

Auto-ignition temperature: N.D.
Decomposition temperature: N.D.
Viscosity: N.D.
Explosive properties: N.D.
Oxidizing properties: N.D.

9.2. Other information

Miscibility: N.D.
Fat Solubility: N.D.
Conductivity: N.D.

Substance Groups relevant properties N.D.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions
Stable under normal conditions

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Not known.

10.6. Hazardous decomposition products

Not known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

a) acute toxicity:

LD50 Oral Rat > 2000 mg/kg. - Calculated data.

b) skin corrosion/irritation:

Irritation Skin: repeated and prolonged contacts may cause slight irritation.

c) serious eye damage/irritation:

Irritation Eye: repeated and prolonged contacts may cause slight irritation.

Toxicological information of the main substances found in the mixture:

Warranty - This information is given in good faith and to the best of our knowledge. Every user of our products is responsible as regards observation of all legal regulations including patent laws. Detailed information on handling, and eventual precautions to be observed in the use of the product can be found on our relevant Health and Safety Information Sheet.





- 2-[2-(2-butoxyethoxy)ethoxy]ethanol
- a) acute toxicity:

Toxicity Oral Rat LD50= 5170 mg/kg Literature data.

Toxicity Skin Rabbit LD50= 3540 mg/kg Literature data.

b) skin corrosion/irritation:

Skin Irritant Rabbit: Not irritant. Literature data.

c) serious eye damage/irritation:

Eye Irritant Rabbit: Irritant. Literature data.

d) respiratory or skin sensitisation:

Guinea pig maximization test Skin Guinea pig: Not sensitizing. By analogy to product with similar composition.

e) germ cell mutagenicity:

OECD 471 Salmonella Typhimurium: Not mutagenic. - Duration: 48h Literature data.

g) reproductive toxicity:

Reproductive Toxicity Oral Mouse NOAEL = 720 mg/kg By analogy to product with similar composition.

Other:

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.D.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Ecological information of the mixture:

a) Aquatic acute toxicity:

LC50 > 100 mg/l - aquatic species (according to the criteria of the CLP Regulation).

Ecological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol

a) Aquatic acute toxicity:

Fish NOEC = 1000 mg/l - Duration h: 96 - Notes: Literature data.

Daphnia magna LC50 = 2210 mg/l - Duration h: 48 - Notes: Literature data.

12.2. Persistence and degradability Ecological

information of the mixture:

Biodegradability: Data not available.

Ecological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol

Biodegradability: Readily biodegradable - Test: OECD 301 D - Duration: 28 days: 85% -

Notes: Literature data.

12.3. Bioaccumulative potential

Ecological information of the mixture:

Bioaccumulation: Data not available.

Ecological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol

Bioaccumulation: Not bioaccumulative - Test: BCF - Bioconcentrantion factor 3 - Notes:

Calculated data.

12.4. Mobility in soil

Ecological information of the mixture:

Warranty - This information is given in good faith and to the best of our knowledge. Every user of our products is responsible as regards observation of all legal regulations including patent laws. Detailed information on handling, and eventual precautions to be observed in the use of the product can be found on our relevant Health and Safety Information Sheet.





Mobility in soil: Data not available.

Ecological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol

Mobility in soil: Very high - Test: Koc: 10 - Notes: Calculated data.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

Use according to criteria of good industrial practice, avoiding product dispersion in the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

If possible recover the product, otherwise dispose of in authorized landfill or incineration in accordance with local regulation.

SECTION 14: Transport information

14.1. UN number

N.A.

14.2. UN proper shipping name

Proper Shipping Name: N.A.

14.3. Transport hazard class(es)

Road (ADR): N.A.
Air (ICAO/IATA): N.A.
Sea (IMO/IMDG): N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A

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

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- 15.2. Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances). Dir. 99/45/EEC (Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EC (Risks related to
- 15.3. chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n. 1907/2006 (REACH).

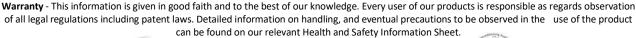
For non-EU Countries, the Material Safety Data Sheet it is prepared following the main principles of Globally Harmonized System of Classification and Labelling of Chemicals (GHS) which are adopted worldwide.

Refer to other local regulations that may be relevant (i.e. : sanitary control, waste treatmentetc.)

15.4. Chemical safety assessment No

SECTION 16: Other information

The 2 -[2 -(2-Butoxyethoxy)ethoxy]ethanol (CAS 143-22-6) has been registered in the European REACH Inventory also with other EC numbers (310-287-7 and 907-996-4) where it appears as main component of unintentional mixtures with the same concentrations of the substance registered as such.







N.A. = Not Applicable N.D. = No Data available

Full text of phrases referred to in Section 3:

R41 Risk of serious damage to eyes.

H318 Causes serious eye damage.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

TOXNET - Databases on toxicology, hazardous chemicals, environmental health, and toxic releases;

NIOSH - Registry of toxic effects of chemical substances (1983) - Occupational Health Guidelines for Chemical Hazards (1995) - Pocket Guide to Chemical Hazards (on line) European Chemical Bureau - ESIS: European chemical Substances Information System;

CESIO - Classification and labelling of anionic, nonionic surfactants (January 2000).

M.Sittig-Handbook of toxic and Hazardous Chemicals and Carcinogens- III Ed.

E.R. Plunkett - Handbook of Industrial Toxicology - III Ed. 1991.

Samson Chem. Pub.-Chemical Safety Sheet working safely with hazardous chemical.

SAX'S Dangerous Properties of Industrial Materials. VIII (1993)

ACGIH "2013 TLVs and BEIs".

ILV "1998/24/EC Directive and subsequent addition".

The product must be stored, handled and used according to criteria of good industrial practice and to regulations in force. This leaflet is offered for your consideration and guidance only. This leaflet complements the Technical Data Sheet but does not replace it. The information herein contained is given to the best of our knowledge at the time of issue.

Due to the several ways in which the product may be used and the possible interaction with variables not depending on or unknown to the supplier, we also cannot accept any liability whatsoever for any loss or damage however arising from the handling and use of our products.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods.INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

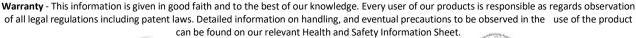
LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

REACH: Registration Evaluation and Authorization of Chemicals.

RID: Regulation Concerning the International Transport of Dangerous Goods





Safety Data Sheet LUBRICANT 947



by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

SVHC: Candidate List of Substances of Very High Concerns.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.

(ACGIH Standard).

WGK: German Water Hazard Class.

