



Safety data sheet

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

Printing date 04.11.2024

Version number 1

Revision: 04.11.2024

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

· 1.1 Product identifier

· Trade name: **Gem Oils Soluble Oil B**

· Registration number Mixture

· UFI: 7R70-E0H8-D007-CWC4

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

· Product category PC25 Metal working fluids

· Application of the substance / the mixture Metal working

· Uses advised against

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Any use involving aerosol formation or vapour release in excess of the assigned Workplace Exposure Limit where workers are exposed without suitable Respiratory Protective Equipment.

Processes involving extreme heat use advised against.

Processes involving the use of incompatible substances - refer to section 10.

The product is intended exclusively for industrial and professional use.

· 1.3 Details of the supplier of the safety data sheet

· Supplier:

Gem Oils Ltd

Regaskin

Cavan

Ireland

Tel: +353 (0) 49 4331077

Fax: +353 (0) 49 4368329

e-mail: productsafety@gemoils.ie

· Further information obtainable from: Product safety department.

· 1.4 Emergency telephone number:

National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)

Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

IN NORTHERN IRELAND:

Members of the public should contact NHS Direct on 111.

* SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS07

· Signal word Warning

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· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· Precautionary statements

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P337+P313 If eye irritation persists: Get medical advice/attention.

· 2.3 Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.*** SECTION 3: Composition/information on ingredients****· 3.2 Mixtures****· Description:** An aqueous blend of highly refined mineral oils, emulsifiers and multifunctional additives.**· Dangerous components:**

CAS: 64742-53-6 EINECS: 265-156-6 Reg.nr.: 01-2119480375-34-XXXX	Distillates (petroleum), hydrotreated light naphthenic ⚠ Asp. Tox. 1, H304	10 – 25%
Neutralisation product	Amine Carboxylate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	10 – 25%
Neutralisation product	Amine Borate Solution ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	2.5 – < 10%
CAS: 112-34-5 EINECS: 203-961-6 Reg.nr.: 01-2119475104-44-XXXX	2-(2-Butoxyethoxy)ethanol ⚠ Eye Irrit. 2, H319	2.5 – < 10%
CAS: 26027-37-2	Oleic acid amidoethanol polyethoxylate ⚠ Eye Irrit. 2, H319	2.5 – < 10%

· Additional information:

Neutralisation products are exempt from registration in accordance with REACH Annex V, 4.

Mineral oil contains <3% DMSO extract as measured by IP346.

For the wording of the listed hazard phrases refer to section 16.

*** SECTION 4: First aid measures****· 4.1 Description of first aid measures****· General information:** Immediately remove any clothing soiled by the product.**· After inhalation:** Supply fresh air; consult doctor in case of complaints.**· After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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- **After swallowing:**
 - Wash mouth out with water
 - Do not induce vomiting; call for medical help immediately.
 - If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
 - **Information for doctor:** Treat symptomatically and supportively.
 - **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
 - **4.3 Indication of any immediate medical attention and special treatment needed**
 - Hand over this safety data sheet to the physician with the special comment "watermiscible cutting fluid".
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* SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
 - **Suitable extinguishing agents:**
 - CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
 - Use fire extinguishing methods suitable to surrounding conditions.
 - **For safety reasons unsuitable extinguishing agents:** Water with full jet
 - **5.2 Special hazards arising from the substance or mixture**
 - In case of fire, the following can be released:
 - Boron compounds
 - Nitrogen oxides (NO_x)
 - Carbon monoxide (CO)
 - Hydrocarbons
 - Sulphur Oxides (SO_x)
 - **5.3 Advice for firefighters**
 - **Protective equipment:**
 - Wear self-contained respiratory protective device.
 - Wear fully protective suit.
 - Do not inhale explosion gases or combustion gases.
 - **Additional information**
 - Cool endangered receptacles with water spray.
 - Collect contaminated fire fighting water separately. It must not enter the sewage system.
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* SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
 - Particular danger of slipping on leaked/spilled product.
 - Wear protective equipment. Keep unprotected persons away.
 - Ensure adequate ventilation
 - **6.2 Environmental precautions:**
 - Do not allow to penetrate the ground/soil.
 - Do not allow product to reach sewage system or any water course in the undiluted form.
 - **6.3 Methods and material for containment and cleaning up:**
 - Contain and collect spillage with non-combustible, absorbent material e.g.sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
 - Wash the area with plenty of water.
 - **6.4 Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
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See Section 13 for disposal information.

* SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.

Avoid splashes or spray in enclosed areas.

Prevent formation of aerosols.

Ensure good ventilation/exhaustion at the workplace.

Safety showers and eye wash facilities should be available at the work area.

· Information about fire - and explosion protection: No special measures required.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Prevent any seepage into the ground.

Store only in the original receptacle.

· Information about storage in one common storage facility: Store away from oxidising agents.

· Further information about storage conditions:

Protect from frost.

Store in cool, dry conditions in well sealed receptacles.

Store in a bunded area.

Protect from heat and direct sunlight.

· Storage class: 12

· 7.3 Specific end use(s) No further relevant information available.

* SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

CAS: 64742-53-6 Distillates (petroleum), hydrotreated light naphthenic

OEL Short-term value: 5 mg/m³, 10 ppm

Long-term value: 2 mg/m³, 4 ppm

Mineral Oil

CAS: 112-34-5 2-(2-Butoxyethoxy)ethanol

OEL Short-term value: 101.2 mg/m³, 12 ppm

Long-term value: 67.5 mg/m³, 10 ppm

IOELV

· DNELs

CAS: 64742-53-6 Distillates (petroleum), hydrotreated light naphthenic

Oral Long-term systemic effects 740 µg/kg bw/day (general population)

Dermal Long-term systemic effects 970 µg/kg bw/day (worker)

Inhalative Long-term systemic effects 2.73 mg/m³ (worker)

Long-term local effects 1.19 mg/m³ (general population)

5.58 mg/m³ (worker)

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CAS: 112-34-5 2-(2-Butoxyethoxy)ethanol

Oral	Long-term systemic effects	6.25 mg/kg bw/day (general population)
Inhalative	Long-term local effects	67.5 mg/m ³ (worker)
	Short-term local effects	101.2 mg/m ³ (worker)

· PNECs**CAS: 64742-53-6 Distillates (petroleum), hydrotreated light naphthenic**

Secondary poisoning	9.33 mg/kg food
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CAS: 112-34-5 2-(2-Butoxyethoxy)ethanol

Freshwater	1.1 mg/L
Freshwater - Intermittent releases	11 mg/L
Marine water	110 µg/L
Sediment (freshwater)	4.4 mg/kg
Sediment (marine water)	440 µg/kg
Soil	320 µg/kg
Secondary poisoning	56 mg/kg food

- **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see section 7.

· Individual protection measures, such as personal protective equipment

Select PPE appropriate for the operations taking place taking into account the product properties.

· General protective and hygienic measures:

- Take note of assigned Workplace Exposure Limits.
- Do not carry product impregnated cleaning cloths in trouser pockets.
- Do not eat, drink, smoke or sniff while working.
- Keep away from foodstuffs, beverages and feed.
- Avoid contact with the eyes and skin.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Do not inhale gases / fumes / aerosols.
- Ensure that eyewash stations and safety showers are close to the workstation location.

· Respiratory protection:

- Use suitable respiratory protective device in case of insufficient ventilation.
- Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

· Hand protection

Protective gloves.

Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Nitrile rubber, NBR

Neoprene gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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· Penetration time of glove material

Break-through time: > 480 minutes

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection

Tightly sealed goggles conforming to EN166.

· Body protection:

Protective work clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

· Environmental exposure controls Do not allow to enter drains, sewers or watercourses.**· Risk management measures** The operators shall be instructed adequately.*** SECTION 9: Physical and chemical properties****· 9.1 Information on basic physical and chemical properties****· General Information**

· Physical state	Fluid
· Colour:	Straw
· Odour:	Perceptible
· Odour threshold:	Not determined.
· Melting point/freezing point:	<0 °C
· Boiling point or initial boiling point and boiling range	> 150 °C
· Flash point:	Not applicable.
· pH at 20 °C	9 (5%)
· Viscosity:	
· Kinematic viscosity at 40 °C	> 20.5 mm ² /s
· Dynamic:	Not determined.
· Solubility	
· water:	Emulsifiable.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20 °C:	0.98 g/cm ³

· 9.2 Other information

NOTE: The physical data presented above are typical values and should not be construed as a specification.

· Appearance:	
· Form:	Liquid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not self-igniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· VOC (EC)	3.00 %

· Information with regard to physical hazard classes

· Explosives	Void
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· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

* SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
Strong acids.
Strong oxidising agents.
- **10.6 Hazardous decomposition products:**
Boron compounds
Carbon monoxide and carbon dioxide
Sulphur oxides (SO_x)
Nitrogen oxides (NO_x)
Toxic metal oxide smoke

* SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

CAS: 64742-53-6 Distillates (petroleum), hydrotreated light naphthenic

Oral LD50 > 5,000 mg/kg (rat)

CAS: 112-34-5 2-(2-Butoxyethoxy)ethanol

Oral LD50 > 2,000 mg/kg (rat)

Dermal LD50 > 2,000 mg/kg (rabbit)

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- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

- **Additional toxicological information:**

Current and relevant legislation requires exposure to metalworking fluids by inhalation, ingestion or skin contact to be prevented where reasonably practicable, or failing that, adequately controlled.

Exposure to metalworking fluids can cause irritation of the skin, dermatitis and breathing problems following repeated exposure. Additionally, if not controlled properly, fluid systems that contain water-mixes can become highly contaminated with microorganisms. These organisms, their metabolites and their remains can affect human health if they should enter the breathing zones of workers and other persons leading to chronic respiratory diseases. Such contamination of fluids and associated machinery and pipework must be appropriately monitored and controlled. Direct means of measuring such contamination must be used in conjunction with other relevant checks on fluid quality. Also, systems containing water-mixes must be appropriately cleaned on a regular basis.

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients are listed.

* SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

CAS: 112-34-5 2-(2-Butoxyethoxy)ethanol

EC50 (96 h) > 100 mg/l (Bacteria)

- **12.2 Persistence and degradability** The organic portion of the product is biodegradable.
- **12.3 Bioaccumulative potential** Contains components with the potential to bioaccumulate.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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* SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

Delivery of waste oil to officially authorised collectors only.

· European waste catalogue

12 00 00	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01 00	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 09*	machining emulsions and solutions free of halogens

· Uncleaned packaging:

· Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Disposal must be made according to official regulations.

Containers, even those that are “empty,” may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR/RID/ADN, ADN, IMDG, IATA Not applicable

· 14.2 UN proper shipping name

· ADR/RID/ADN, ADN, IMDG, IATA Not applicable

· 14.3 Transport hazard class(es)

· ADR/RID/ADN, ADN, IMDG, IATA

· Class Not applicable

· 14.4 Packing group

· ADR/RID/ADN, IMDG, IATA Not applicable

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

Not applicable.

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

· Transport/Additional information:

Not dangerous according to the above specifications.

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· UN "Model Regulation":	Not applicable
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* SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients are listed.

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 55

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients are listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients are listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients are listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients are listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients are listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

* SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· Relevant phrases

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· Training hints

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

· Department issuing SDS: Product safety department.

· Date of previous version: 17.09.2024

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

· *** Data compared to the previous version altered.**
