SAFETY DATA SHEET

SUB ZERO UNIVERSAL

Compilation date: 20/09/2016

Revision No: 1

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

1.1. Product identifier

Product name: SUB ZERO UNIVERSAL

Product code: 2631,2632

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

1.3. Details of the supplier of the safety data sheet

Company name: Granville Oil & Chemicals Ltd.
Unit 29 Goldthorpe Industrial Estate
Goldthorpe
Rotherham
South Yorkshire
S63 9BL
United Kingdom

Tel: +44 (0)1709 890099

Fax: +44 (0)1709 891121

Email: technical@granvilleoil.com

1.4. Emergency telephone number

Emergency tel: +44 (0)1709 890099
(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302; STOT RE 2: H373

Most important adverse effects: Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Label elements:

Hazard statements: H302: Harmful if swallowed.
H373: May cause damage to organs through prolonged or repeated exposure.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark
GHS08: Health hazard

[cont...]

Precautionary statements: P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/.

P330: Rinse mouth.

P501: Dispose of contents/container to accordance with national regulations.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

MONO ETHYLENE GLYCOL

EINECS	CAS	PBT / WEL	CLP Classification	Percent
203-473-3	107-21-1	-	Acute Tox. 4: H302; STOT RE 2: H373	30-50%

Non-classified ingredients:

SODIUM 2-ETHYLHEXANOATE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
243-283-8	19766-89-3	-	-: H361	1-10%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. If irritation persists, consult a doctor

Eye contact: Remove any contact lenses and open eyes wide apart. Bathe the eye with running water for 15 minutes. Get medical attention if any discomfort continues.

Ingestion: Place unconscious person on their side in the recovery position and ensure breathing can take place Do not induce vomiting. Wash out mouth with water. Never give anything by mouth to an unconscious person. If conscious, give half a litre of water to drink immediately. Get medical attention immediately

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Place unconscious person on their side in recovery position and ensure breathing can take place. Get medical attention immediately.

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

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting.

[cont...]

Inhalation: Absorption through the lungs can occur causing symptoms similar to those of ingestion.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Treat symptomatically

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Alcohol resistant foam. Carbon dioxide. Dry chemical powder. Water fog. Sand. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Containers can burst violently or explode when heated due to excessive presure build-up.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Cool containers at risk with water. Do not allow run off from fire to be poured into drains or watercourses.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Ensure sufficient ventilation. Avoid breathing vapor Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Do not use equipment in clean-up procedure which may produce sparks. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Do not handle in a confined space. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air. Keep away from sources of ignition. Avoid direct contact with the substance.

[cont...]

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

Storage quantity limits: Unspecified

7.3. Specific end use(s)

Specific end use(s): PC4: Anti-Freeze and de-icing products.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

MONO ETHYLENE GLYCOL

Workplace exposure limits: **Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	52 mg/m3	104 mg/m3	-	-

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection: Protective gloves.

Eye protection: Safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Solubility in water: Soluble

Flash point°C: not applicable

Vapour pressure: >1 mPa@degC

Relative density: 1.072

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

[cont...]

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat. Flames. Sources of ignition.

10.5. Incompatible materials

Materials to avoid: Acids. Strong oxidising agents. Sulphuric Acid Oleum Phosphorous Pentasulphide Chlorosulphonic acid

10.6. Hazardous decomposition products

Haz. decomp. products: No hazardous decomposition products under normal contions of storage and use.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

MONO ETHYLENE GLYCOL

IVN	RAT	LD50	3260	mg/kg
ORAL	MUS	LD50	5500	mg/kg
ORAL	RAT	LD50	4700	mg/kg

Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
STOT-repeated exposure	-	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: Absorption through the lungs can occur causing symptoms similar to those of ingestion.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

[cont...]

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
Fat-head Minnow	96H LC50	72860	mg/l
Daphnia magna	48H EC50	100	mg/l
Selenastrum capricornatum	96H EC50	6500	mg/l
Activated Sludge	30 mins EC50	225	mg/l

12.2. Persistence and degradability

Persistence and degradability: Not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the locasl Waste Disposal Authority.

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

[cont...]

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H302: Harmful if swallowed.

H361: Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.