

Kamco Limited

MATERIAL SAFETY DATA SHEET

FREEZBREAKER-LT

Revision date: 09/2018

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

1.1. Product identifier

Product name: FREEZBREAKER-LT

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

Use of substance / mixture: Antifreeze additive for cooling and heating systems.

1.3. Details of the supplier of the safety data sheet

Company name: Kamco Ltd
Unit 9, Curo Park
Frogmore
St Albans
Herts
AL2 2DD

Tel: 01727 875020

Email: info@kamco.co.uk

1.4. Emergency telephone number

Emergency Number (Office hours 8am-5pm): 01727 875020

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: Not Classified

Classification under CLP:

Physical: Not Classified

Health: Not Classified

Environmental: This product is not expected to be hazardous to the environment.

2.2. Label elements

Label elements under CLP: EC number 200-338-0

Hazard statements: Not Classified

Signal words:

Hazard pictograms:

Precautionary statements:

2.3. Other hazards

Other hazards: This substance is not classified as PBT or vPvB according to current EU criteria.

Section 3: Composition/information on ingredients

3.1. Substances

Ingredients:

Ingredients	EINECS	CAS	Reach No:
MONOPROPYLENE GLYCOL	200-338-0	57-55-6	01-2119456809-23

Section 4: First aid measures

4.1. Description of first aid measures

- Skin contact:** Remove contaminated clothing immediately and wash skin with soap and water. Rinse with water. Get medical attention if any discomfort continues.
- Eye contact:** Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
- Ingestion:** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.
- Inhalation:** Move affected person to fresh air at once. Get medical attention if any discomfort continues

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

Eye contact: May cause temporary eye irritation.

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

Notes for the doctor: No specific recommendations. If in doubt, get medical attention promptly.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Specific hazards: Oxides of the following substances: Carbon.

5.3. Advice for fire-fighters

Special protective equipment for fire-fighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Follow precautions for safe handling described in this safety data sheet.

6.2. Environmental precautions

Environmental precautions: Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections: Wear protective clothing as described in Section 8 of this safety data sheet.

Section 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions: Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation.

7.2. Conditions for safe storage, including and incompatibilities

Storage precautions: Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store in closed original container at temperatures between 0°C and 40°C.

7.3. Specific end use(s)

Specific end uses(s): The identified uses for this product are detailed in Section 1.2.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Long-term exposure limit (8-hour TWA): WEL 150 ppm 474 mg/m³ total vapour and particulates

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

Ingredient comments: WEL = Workplace Exposure Limits

DNEL: Industry - Inhalation; Long term systemic effects: 50mg/m³
Industry - Inhalation; Long term local effects: 10 mg/m³
Consumer - Inhalation; Long term systemic effects: 168mg/m³
Consumer - Inhalation; Long term local effects: 10 mg/m³

PNEC: - Fresh water; 260 mg/l
- Marine water; 26 mg/l
- STP; 20000 mg/l
- Sediment (Freshwater); 572 mg/l
- Sediment (Marine water); 57.2 mg/l
- Soil; 50 mg/l

8.2. Exposure controls

Protective equipment:



Eye/face protection: The following protection should be worn: Chemical splash goggles.

Hand protection: Use protective gloves.

Other skin and body protection: Wear rubber apron. Wear rubber footwear.

Respiratory protection: If ventilation is inadequate, suitable respiratory protection must be worn. EN136/140/145/143/149

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: Liquid

Colour: Colourless, or various colours.

Odour: Odourless.

pH: pH (concentrated solution): 7 - 10

Melting Point: <-51°C

Initial Boiling Point/Range: 184°C @ 760 mm Hg

Flash Point: 104°C PMCC (Pensky-Martens closed cup).

Evaporation Rate (nBuAc=1): 0.01

Upper Explosive/Flammability Limits (vol % in air): Upper flammable/explosive limit: 12.5

Lower Explosive/Flammability Limits (vol % in air): Lower flammable/explosive limit: 2.6

Vapour Pressure: <10 mbar @ °C

Relative Density (water=1): 1.03 - 1.05 @ 20°C

Solubility (ies): Soluble in water.

Partition Coefficient (n-octanol/water) (Kow): log Pow: -1.07

Auto-ignition Temperature: >370°C

Viscosity: 43 cSt @ 20°C

9.2. Other information

Other information: Not determined

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Chemical stability: Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Hazardous reactions: Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid: Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products: Oxides of the following substances: Carbon.

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity oral (LD50 mg/kg): 20,000 (Rat)

Acute toxicity dermal (LD50 mg/kg): 2,000 (Rabbit)

Notes (dermal LD50): LD50>2000mg/kg, Dermal, Rabbit

Symptoms / routes of exposure

Aspiration Hazard:

Skin Corrosion/Irritation: Animal data: Not irritating.

Serious Eye Damage/Irritation: Data lacking.

Signs and Symptoms:

Skin Sensitisation: Not sensitising.

Respiratory Sensitisation:

**Specific Target Organ Toxicity
(Single Exposure):**

**Specific Target Organ Toxicity
(Repeated Exposure):**

Target organs: Central nervous system

Inhalation: May cause respiratory system irritation.

Ingestion: Gastrointestinal symptoms, including upset stomach.

Skin contact: Slightly irritating.

Eye contact: May cause temporary eye irritation.

Carcinogenicity: There is no evidence that the product can cause cancer.

Germ Cell Mutagenicity: This substance has no evidence of mutagenic properties.

Reproductive Toxicity: This substance has no evidence of toxicity to reproduction.

Section 12: Ecological information

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Acute toxicity – fish: LC50, 96 hours, 96 hours: 40613 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity – aquatic invertebrates: EC50, 48 hours, 48 hours: > 4000 mg/l, Daphnia magna

Acute toxicity - aquatic plants: EC50, 96 hours, 96 hours: 19000 mg/l, Scenedesmus subspicatus

12.2. Persistence and degradability

Persistence and degradability: The substance is readily biodegradable.

Biodegradation: - Degradation (%) 81: > 28 days
OECD 301F
- Degradation (%) 96: 64 days

12.3. Bioaccumulative potential

Bioaccumulative potential: The product is not bioaccumulating. BCF: < 100,

Partition coefficient: log Pow: -1.07

12.4. Mobility in soil

Mobility: The product is soluble in water.

Henry's law constant: 1.2 E -08 atm m³/mol @ °C

12.5. Results of PBT and vPvB assessment

PBT or vPvB identification: This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects: No information required.

Section 13: Disposal considerations

13.1. Waste treatment methods

General information: Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not puncture or incinerate, even when empty.

Disposal methods: Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Section 14: Transport information

General: The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

UN number: No information required.

UN proper shipping name: No information required.

Transport class: No information required.

Packing Group: No information required.

Environmentally hazardous substance/marine pollutant: No

Special precautions for user: No information required.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: No information required.

Section 15: Regulatory information

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

- National regulations:** The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
- EU legislation:** Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
- Guidance:** CHIP for everyone HSG228.
Approved Classification and Labelling Guide (Sixth edition) L131.
Safety Data Sheets for Substances and Preparations.

15.2. Chemical Safety Assessment

- Chemical safety assessment:** A chemical safety assessment has been carried out.
- Inventories:** Canada - DSL/NDSL:
DSL

Section 16: Other information

List of relevant hazard statements:

Legal disclaimer: