

SAFETY DATA SHEET DEMON ICE

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

1.1. Product identifier

Product name DEMON ICE

Product number CDI002, CDI096, CDD001, CDI001, CDI999

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

Identified uses Glass cleaner.

1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL LIMITED

Bury Lancashire England BL9 7NY 0161 764 5981 0161 797 5899 info@tetrosyl.com

Manufacturer TETROSYL LIMITED

Bury Lancashire England BL9 7NY 0161 764 5981 0161 797 5899 info@tetrosyl.com

1.4. Emergency telephone number

Emergency telephone +44 (0)161 764 5981

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards STOT RE 2 - H373

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms





Signal word Warning

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Hazard statements H226 Flammable liquid and vapour.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P260 Do not breathe vapour/ spray.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or shower.

P314 Get medical advice/ attention if you feel unwell.

P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/ container in accordance with national regulations.

Contains ETHANEDIOL

Supplementary precautionary

P233 Keep container tightly closed.

statements

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

2.3. Other hazards

Not applicable.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ETHANEDIOL 10-<30%

CAS number: 107-21-1 EC number: 203-473-3 REACH registration number: 01-

2119456816-28-0000

Classification

Acute Tox. 4 - H302 STOT RE 2 - H373

ETHANOL 10-<30%

CAS number: 64-17-5 EC number: 200-578-6 REACH registration number: 01-

2119457610-43-0000

Classification

Flam. Liq. 2 - H225 Eye Irrit. 2 - H319

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 DIETHANOLAMINE

 CAS number: 111-42-2
 EC number: 203-868-0

 Classification

 Acute Tox. 4 - H302

 Skin Irrit. 2 - H315

 Eye Dam. 1 - H318

 STOT RE 2 - H373

CAS number: 141-78-6 ### CAS number: 205-500-4 ### REACH registration number: 01-2119475103-46-0000

| Classification | Flam. Liq. 2 - H225 | Eye Irrit. 2 - H319 | STOT SE 3 - H336

 CYCLOHEXANE
 0.001 - <0.005%</th>

 CAS number: 110-82-7
 EC number: 203-806-2

 M factor (Acute) = 1
 M factor (Chronic) = 1

Classification

Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Get medical attention if any discomfort continues. Remove affected person from source of

contamination. Effects may be delayed. Keep affected person under observation.

Inhalation Remove affected person from source of contamination. Get medical attention if any discomfort

continues. For breathing difficulties, oxygen may be necessary. If breathing stops, provide

artificial respiration.

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Ingestion Get medical attention if any discomfort continues. Rinse mouth thoroughly with water. Give

plenty of water to drink. Get medical attention if a large quantity has been ingested. Show this

Safety Data Sheet to the medical personnel.

Skin contact Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if

any discomfort continues.

Eye contact Do not rub eye. 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 irritation

persists after washing. Show this Safety Data Sheet to the medical personnel.

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

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure. Effects may be delayed. Keep affected person under observation.

Inhalation Vapours in high concentrations are anaesthetic. Symptoms following overexposure may

include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Irritation of nose, throat and airway.

Ingestion May cause discomfort if swallowed. May cause stomach pain or vomiting. Ingestion of large

amounts may cause unconsciousness. May cause nausea, headache, dizziness and

intoxication. Burning sensation in mouth.

Skin contact Prolonged skin contact may cause redness and irritation. Mild dermatitis, allergic skin rash.

Eye contact Irritation of eyes and mucous membranes.

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: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Foam, carbon dioxide or dry powder. Water. Use fire-

extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Vapours may form explosive mixtures with air. May form explosive mixture with air at very

high concentration.

Hazardous combustion

products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during

firefighting

No specific firefighting precautions known.

Special protective equipment

for firefighters

Leave danger zone immediately. Wear positive-pressure self-contained breathing apparatus

(SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. No smoking,

sparks, flames or other sources of ignition near spillage. Avoid inhalation of spray mist and contact with skin and eyes. In case of spills, beware of slippery floors and surfaces.

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6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Collect and dispose of

spillage as indicated in Section 13.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Eliminate all sources of ignition. No smoking, sparks, flames

or other sources of ignition near spillage. Provide adequate ventilation. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with non-

combustible, absorbent material.

6.4. Reference to other sections

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

disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Keep away from heat, sparks and open

flame. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the

work site. Do not eat, drink or smoke when using the product. Avoid inhalation of

vapours/spray and contact with skin and eyes. Avoid the formation of mists. Observe any occupational exposure limits for the product or ingredients. Avoid inhalation of vapours and

spray/mists.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Keep container tightly closed. Keep containers

upright. Keep only in the original container. Store away from the following materials: Acids.

Oxidising materials.

7.3. Specific end use(s)

Specific end use(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

ETHANEDIOL

Long-term exposure limit (8-hour TWA): WEL 20 ppm 52 mg/m³ vapour Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m³ vapour

Sk

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

Sk

IPA

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³ Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

DIETHANOLAMINE

Long-term exposure limit (8-hour TWA): OES 3 ppm 15 mg/m³

Short-term exposure limit (15-minute): OES

ETHYL ACETATE

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Long-term exposure limit (8-hour TWA): WEL 200 ppm Short-term exposure limit (15-minute): WEL 400 ppm

CYCLOHEXANE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 350 mg/m³ Short-term exposure limit (15-minute): WEL 300 ppm 1050 mg/m³

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment





Appropriate engineering

controls

Avoid inhalation of vapours. Observe any occupational exposure limits for the product or

ingredients. Provide adequate ventilation.

Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates

eye contact is possible. Unless the assessment indicates a higher degree of protection is

required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if

a risk assessment indicates skin contact is possible. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. It is recommended that gloves are made of the following material: Nitrile rubber. It is recommended that gloves are made of

the following material: Polyvinyl chloride (PVC). Rubber (natural, latex).

Other skin and body

protection

Provide eyewash station.

Hygiene measures Wash contaminated clothing before reuse. Wash at the end of each work shift and before

eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Respiratory protectionNo specific recommendations. Respiratory protection must be used if the airborne

contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Clear liquid.

Colour Blue.

Odour Slight alcoholic.

pH pH (concentrated solution): 6.0

Melting point Not determined.

Initial boiling point and range 80°C @ 1.013 hPa

Flash point 30.5°C

Evaporation rate Not determined.

Upper/lower flammability or

explosive limits

Not determined.

Vapour pressure Not determined.

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Vapour density Not determined.

Relative density 0.996g/cm³ @ 20°C

Solubility(ies) Miscible with water.

Partition coefficient Not determined.

Auto-ignition temperature Not determined.

Decomposition Temperature Not determined.

Viscosity 160 cP @ 20°C

Explosive properties Not considered to be explosive.

Explosive under the influence

of a flame

Not considered to be explosive.

Oxidising properties Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Acids. Aldehydes. Isocyanates. Strong

oxidising agents.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

Not determined.

10.4. Conditions to avoid

Conditions to avoid Avoid contact with strong oxidising agents. Avoid heat, flames and other sources of ignition.

Avoid contact with acids. Avoid contact with the following materials: Acids. Oxidising agents. The following materials may react violently with the product: Earth metals such as sodium,

potassium and barium.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Alkali metals. Metal oxides. Aldehydes. Isocyanates.

10.6. Hazardous decomposition products

Hazardous decomposition

Does not decompose when used and stored as recommended.

products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 2,564.1

InhalationNo specific health hazards known.IngestionMay cause discomfort if swallowed.

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Skin contact Prolonged and frequent contact may cause redness and irritation.

Eye contact May cause temporary eye irritation.

Acute and chronic health

hazards

May cause damage to organs through prolonged or repeated exposure.

SECTION 12: Ecological information

Ecotoxicity 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 aquatic toxicity

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility The product is miscible with water and may spread in water systems.

Adsorption/desorption

coefficient

Not available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

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

12.6. Other adverse effects

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in

accordance with the requirements of the local Waste Disposal Authority.

Disposal methodsConfirm disposal procedures with environmental engineer and local regulations.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1993

UN No. (IMDG) 1993

UN No. (ICAO) 1993

UN No. (ADN) 1993

14.2. UN proper shipping name

Proper shipping name

FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, CYCLOHEXANE)

(ADR/RID)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, CYCLOHEXANE)

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Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, CYCLOHEXANE)

Proper shipping name (ADN) FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, CYCLOHEXANE)

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

ADN packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-E, S-E

ADR transport category 3

Emergency Action Code •3Y

Hazard Identification Number 30

(ADR/RID)

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

National regulations EH40/2005 Workplace exposure limits

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).

15.2. Chemical safety assessment

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No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Issued by Health & Safety Department

Revision date 22/02/2019

Revision 1

SDS number 32442

SDS status Approved.

Hazard statements in full H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.