Revision Date 21/06/2012 SDS No. 10287

Revision 2

Supersedes date 01/09/2010



SAFETY DATA SHEET GLASS CLEAN

According to Regulation (EU) No 453/2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name GLASS CLEAN

Product No. C-331

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

Identified uses Glass cleaner.

Uses advised againstNo specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Cyclo Industries Inc.

Regent House Business Centre

24-25 Nutford Place Marble Arch London W1H 5YN 0797 6921836 E mail ehs@cyclo.com

1.4. Emergency telephone number

001 312 906 6194

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) F+;R12.

Physical and Chemical Hazards

Aerosol containers can explode when heated, due to excessive pressure build-up. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Detergent Labelling:

< 5% Aliphatic hydrocarbons

Labelling



Extremely flammable

Risk Phrases

R12 Extremely flammable.

Safety Phrases

A1 Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

A2 Do not spray on a naked flame or any incandescent material.

S2 Keep out of the reach of children.

S16 Keep away from sources of ignition - No smoking.

S23 Do not breathe vapour/spray.

S51

Use only in well-ventilated areas.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ISOBUTANE			5-10%
CAS-No.: 75-28-5	EC No.: 200-857-2		
Classification (EC 1272/2008) Flam. Gas 1 - H220		Classification (67/548/EEC) F+;R12	

PETROLEUM GASES, LIQUEFIED, SWEETENED				1-5%
	CAS-No.: 68476-86-8	EC No.: 270-705-8		
	Classification (EC 1272/2008)		Classification (67/548/EEC)	
	Flam. Liq. 1 - H224		F+;R12.	

PROPAN-2-OL			1-5%
CAS-No.: 67-63-0	EC No.: 200-661-7		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Liq. 2 - H225		F;R11	
Eye Irrit. 2 - H319		Xi;R36	
STOT SF 3 - H336		R67	

PROPANE			1-5%
CAS-No.: 74-98-6	EC No.: 200-827-9		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Gas 1 - H220 Press Gas Liquefied - H280		F+;R12	

2-BUTOXYETHANOL			1-5%
CAS-No.: 111-76-2	EC No.: 203-905-0		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Acute Tox. 4 - H302		Xn;R20/21/22	
Acute Tox. 4 - H312		Xi;R36/38	
Acute Tox. 4 - H332			
Skin Irrit. 2 - H315			
Eve Irrit 2 - H319			

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

Isobutane contains < 0.1% 1, 3-butadiene.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

General first aid. rest. warmth and fresh air.

Inhalation

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. Place unconscious person on the side in the recovery position and ensure breathing can take place. Get medical attention.

Ingestior

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Do not induce vomiting. Immediately rinse mouth and provide fresh air. Get medical attention.

Skin contact

Wash skin thoroughly with soap and water. Dry skin with paper towel or similar. Get medical attention if any discomfort continues.

Eye contact

Spray in the eyes: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation.

Vapours may cause drowsiness and dizziness.

Ingestion

May cause stomach pain or vomiting.

Skin contact

Prolonged contact may cause redness, irritation and dry skin.

Eye contact

Profuse watering of the eyes. Irritation of eyes and mucous membranes.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Fire can be extinguished using: Dry chemicals, sand, dolomite etc. Foam, carbon dioxide or dry powder. Water spray, fog or mist.

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

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards

Aerosol cans may explode in a fire. Vapours are heavier than air and may spread near ground to sources of ignition.

Specific hazards

Pressurised container: Must not be exposed to temperatures above 50°C.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Move container from fire area if it can be done without risk. Water spray should be used to cool containers. Use water spray to reduce vapours.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

6.3. Methods and material for containment and cleaning up

Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Clean contaminated area with oil-removing material.

6.4. Reference to other sections

For personal protection, see section 8. See section 11 for additional information on health hazards.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Provide good ventilation. Avoid inhalation of vapours/spray and contact with skin and eyes. Keep away from heat, sparks and open flame. Observe good chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Keep away from heat, sparks and open flame. Store in a cool and well-ventilated place.

7.3. 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

Name	STD	TWA	- 8 Hrs	STEL	- 15 Min	Notes
2-BUTOXYETHANOL	WEL	25 ppm	123 mg/m3	50 ppm	246 mg/m3	Sk
PROPAN-2-OL	WEL	400 ppm	999 mg/m3	500 ppm	1250 mg/m3	

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

2-BUTOXYETHANOL (CAS: 111-76-2)

Biological Limit Values

- 240 mmol/mol creatine
- 2 -Butoxyethanol Post Shift.

8.2. Exposure controls

Protective equipment





Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. In case of inadequate ventilation use suitable respirator. Chemical respirator with organic vapour cartridge.

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Hand protection

Use suitable protective gloves if risk of skin contact. Use protective gloves made of: or Viton rubber (fluor rubber).

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Other Protection

Provide eyewash station. Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash hands at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or

Environmental Exposure Controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Aerosol. Colour Colourless.

Odour Pleasant, agreeable. Solubility Completely soluble in water

Initial boiling point and boiling range

Not available Melting point (°C) Not applicable.

1.00 Relative density

Bulk Density Not available.

Vapour density (air=1)

Vapour pressure 25 - 35 mm Hg @ 20°C

Evaporation rate Not available. **Evaporation Factor** Not available.

pH-Value, Conc. Solution

Not applicable.

pH-Value, Diluted Solution

Not available. Viscosity

Not determined.

Solubility Value (G/100G H2O@20°C)

Not available.

Decomposition temperature (°C)

Not available.

Odour Threshold, Lower

Not available.

Odour Threshold, Upper

Not available.

Flash point

Not available.

Auto Ignition Temperature (°C)

Not available.

Flammability Limit - Lower(%) 2.1 Flammability Limit - Upper(%) 13.0

Partition Coefficient (N-Octanol/Water) Not determined.

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Oxidising properties

Does not meet the criteria for oxidising

Comments Information given concerns the concentrated solution.

9.2. Other information

Volatile By Vol. (%) <12%

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not known.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid exposing aerosol containers to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Aspiration hazard:

Viscosity

Not determined.

Not relevant, due to the form of the product.

Inhalation

In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Ingestion

No harmful effects expected in amounts likely to be ingested by accident. May cause stomach pain or vomiting.

Skin contact

Liquid may irritate skin.

Eye contact

Spray and vapour in the eyes may cause irritation and smarting.

Health Warnings

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Route of entry

Inhalation. Skin and/or eye contact.

Target Organs

No specific target organs noted

Medical Symptoms

No specific symptoms noted.

Medical Considerations

No information about adverse effects due to exposure.

Specific effects

No specific symptoms noted.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Acute Fish Toxicity

Not considered toxic to fish.

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Partition coefficient

Not determined.

12.4. Mobility in soil

Mobility:

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN) 1950 **UN No. (IMDG)** 1950

UN No. (ICAO) 1950

14.2. UN proper shipping name

Proper Shipping Name AEROSOLS

14.3. Transport hazard class(es)

ADR/RID/ADN Class 2

ADR/RID/ADN Class Class 2: Gases

ADR Label No. 2.1

IMDG Class 2.1

ICAO Class/Division 2.1

Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group N/A

IMDG Packing group N/A

ICAO Packing group N/A

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

EMS F-D, S-U
Tunnel Restriction Code (D)

14.7. Transport in bulk according to Annex II of MARPOL73/78 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

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Workplace Exposure Limits 2005 (EH40)

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

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15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

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Risk Phrases In Full

R12 Extremely flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R11 Highly flammable

R36/38 Irritating to eyes and skin.

R36 Irritating to eyes.

R67 Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H280 Contains gas under pressure; may explode if heated.

H222 Extremely flammable aerosol. H220 Extremely flammable gas.

H224 Extremely flammable liquid and vapour.

H332 Harmful if inhaled.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.

H225 Highly flammable liquid and vapour.H336 May cause drowsiness or dizziness.

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