

SAFETY DATA SHEET**Reflect****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier****Product name** Reflect**1.2. Relevant identified uses of the substance or mixture and uses advised against****Identified uses** Window glass cleaner.**1.3. Details of the supplier of the safety data sheet****Supplier** Aztec Chemicals
Unit 16, University Way
Orion Park
Crewe
Cheshire
CW1 6NG
+ 44 (0) 1270 655500 (T)
+ 44 (0) 1270 655501 (F)
info@aztecchemicals.com**1.4. Emergency telephone number****Emergency telephone** +44 (0)7831 300868**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification****Physical hazards**

Aerosol 1 - H222, H229

Health hazards

Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards

Not Classified

Classification (67/548/EEC or 1999/45/EC)

F+;R12. R67.

Human health

Gas or vapour is harmful on prolonged exposure or in high concentrations. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Environmental

This product does not contain substances which are harmful to aquatic organisms or which may cause long term effects to the aquatic environment

Physicochemical

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

2.2. Label elements**Pictogram****Signal word****Danger**

Reflect**Hazard statements**

H222 Extremely flammable aerosol.
 H229 Pressurised container: may burst if heated
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P211 Do not spray on an open flame or other ignition source.
 P251 Do not pierce or burn, even after use.
 P271 Use only outdoors or in a well-ventilated area.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 P102 Keep out of reach of children.
 P501 Dispose of contents/container in accordance with local regulations.
 P260 Do not breathe vapour/spray.

Contains

PROPAN-2-OL, 1-METHOXY-2-PROPANOL

Detergent labelling

5 - < 15% aliphatic hydrocarbons, < 5% non-ionic surfactants

2.3. Other hazards**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

PROPAN-2-OL	10-30%
CAS number: 67-63-0 EC number: 200-661-7 REACH registration number: 01-2119457558-25	
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 2 - H225	F;R11 Xi;R36 R67
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
1-METHOXY-2-PROPANOL	5-10%
CAS number: 107-98-2 EC number: 203-539-1 REACH registration number: 01-2119457435-35	
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 3 - H226	R10 R67
STOT SE 3 - H336	
BUTANE	5-10%
CAS number: 106-97-8 EC number: 203-448-7 REACH registration number: Exempt under REACH	
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Gas 1 - H220	F+;R12
Press. Gas	
ISOBUTANE	1-5%
CAS number: 75-28-5 EC number: 200-857-2 REACH registration number: Exempt under REACH	
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Gas 1 - H220	F+;R12
Press. Gas	

Reflect

PROPANE 1-5%	
CAS number: 74-98-6 EC number: 200-827-9 REACH registration number: Exempt under REACH	
Classification Flam. Gas 1 - H220 Press. Gas	Classification (67/548/EEC or 1999/45/EC) F+;R12
AMMONIA ...% <1%	
CAS number: 1336-21-6 EC number: 215-647-6 REACH registration number: 01-2119488876-14	
Classification Skin Corr. 1B - H314 STOT SE 3 - H335	Classification (67/548/EEC or 1999/45/EC) C;R34 N;R50
SODIUM NITRITE <1%	
CAS number: 7632-00-0 EC number: 231-555-9 REACH registration number: 01-2119471836-27 M factor (Acute) = 1	
Classification Ox. Sol. 3 - H272 Acute Tox. 3 - H301 Aquatic Acute 1 - H400	Classification (67/548/EEC or 1999/45/EC) O;R8 T;R25 N;R50

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Move affected person to fresh air at once.

Inhalation

If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.

Ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water.

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. Continue to rinse for at least 15 minutes and get medical attention.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Specific hazards

Containers can burst violently or explode when heated, due to excessive pressure build-up. Extremely flammable. Forms

Reflect

explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters

Protective actions during firefighting

Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Warn firefighters that aerosols are involved.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours.

6.2. Environmental precautions

Environmental precautions

Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion.

6.4. Reference to other sections

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. Eliminate all sources of ignition. Do not spray on a naked flame or any incandescent material.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Extremely flammable. Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well ventilated area. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Reflect**PROPAN-2-OL**

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

1-METHOXY-2-PROPANOL

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk) 375 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 150 ppm(Sk) 560 mg/m³(Sk)

BUTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm

Short-term exposure limit (15-minute): WEL 750 ppm

ISOBUTANE

Long-term exposure limit (8-hour TWA): WEL 800 ppm

Short-term exposure limit (15-minute): WEL No std.

PROPANE

Long-term exposure limit (8-hour TWA): SUP ppm

Short-term exposure limit (15-minute): SUP ppm

SODIUM NITRITE

Long-term exposure limit (8-hour TWA): No std.

WEL = Workplace Exposure Limit

Ingredient comments

WEL = Workplace Exposure Limits

PROPAN-2-OL (CAS: 67-63-0)

DNEL	Industry - Dermal; Long term systemic effects: 888 mg/kg/day Industry - Inhalation; Long term systemic effects: 500 mg/m ³ Consumer - Dermal; Long term systemic effects: 319 mg/kg/day Consumer - Dermal; Long term systemic effects: 26 mg/kg/day Consumer - Inhalation; Long term systemic effects: 89 mg/m ³
PNEC	- Fresh water; 140.9 mg/l - Marine water; 140.9 mg/l - Intermittent release; 140.9 mg/l - Sediment (Freshwater); 552 mg/kg - Sediment (Marinewater); 552 mg/kg - STP; 2251 mg/l - Soil; 28 mg/kg

8.2. Exposure controls**Appropriate engineering controls**

Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.

Personal protection

When using do not smoke.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

Hand protection

Due to the packaging form, aerosol, risk of skin contact is small. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Hygiene measures

Reflect

Wash hands after handling. Wash promptly if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Aerosol.

Odour

Organic solvents.

Flash point

<-40°C

Upper/lower flammability or explosive limits

Lower : 1.8% - Upper 9.5%

Auto-ignition temperature

410-580°C

Comments

Information given is applicable to the major ingredient.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stability

Avoid the following conditions: Heat, sparks, flames.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

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

10.5. Incompatible materials

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)

100,000.0

General information

Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Inhalation

In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.

Skin contact

Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.

Eye contact

Reflect

Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health hazards

Arrhythmia (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Route of entry

Inhalation

Target organs

Central nervous system Respiratory system, lungs

Medical symptoms

Arrhythmia (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

SECTION 12: Ecological Information

Ecotoxicity

No negative effects on the aquatic environment are known. The product is not expected to be toxic to aquatic organisms.

12.1. Toxicity

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

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. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion.

SECTION 14: Transport information

General This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed and labelled must show the following.

14.1. UN number

UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	AEROSOLS
Proper shipping name (IMDG)	AEROSOLS
Proper shipping name (ICAO)	AEROSOLS
Proper shipping name (ADN)	AEROSOLS

Reflect**14.3. Transport hazard class(es)**

ADR/RID class	2.1
ADR/RID subsidiary risk	
ADR/RID label	2.1
IMDG class	2.1
IMDG subsidiary risk	
ICAO class/division	2.1
ICAO subsidiary risk	
Transport labels	

**14.4. Packing group**

Not applicable.

ADR/RID packing group

IMDG packing group

ICAO packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-D, S-U

Emergency Action Code

Hazard Identification Number
(ADR/RID)

Tunnel restriction code (D)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation

Commission Regulation (EU) No 453/2010 of 20 May 2010.

Guidance

Workplace Exposure Limits EH40. CHIP for everyone HSG228. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131. British Aerosol Manufacturers Code of Practice 7th. Edition 1999

15.2. Chemical safety assessment**SECTION 16: Other information**

Revision date	21/10/2014
Revision	1
SDS number	10222
SDS status	Approved.

Reflect

Risk phrases in full

R10 Flammable.
R11 Highly flammable.
R12 Extremely flammable.
R25 Toxic if swallowed.
R34 Causes burns.
R36 Irritating to eyes.
R37 Irritating to respiratory system.
R50 Very toxic to aquatic organisms.
R67 Vapours may cause drowsiness and dizziness.
R8 Contact with combustible material may cause fire.

Hazard statements in full

H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H229 Pressurised container: may burst if heated
H272 May intensify fire; oxidiser.
H301 Toxic if swallowed.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.