

Clear Reflections

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Issued: 14/11/2017; Revision No.2
Regulation (EU) 453/2010

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Material name : Clear Reflections

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

Product use : Mirror and glass cleaner

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: IMG Ltd.,
Unit M
Riverside Industrial Estate
Fazeley
Tamworth
B78 3RW

Tel. : 01827 283322
Fax. : 01827 250143
Email (for SDSs) : sales@img-limited.co.uk

1.4 Emergency tel. no.: 01827 283322 (Available from 08.30-17.00 hours).

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to 1272/2008/EC: Classification, Labelling and Packaging of Substances and Mixtures (CLP) Regulation:

Physical and Chemical Hazards	Flam.Aerosol ; H222; H229
Human health	Not classified
Environment	Not classified

2.2 Label elements

Labelling according to EC Directives: 1272/2008/EC

Signal word: Danger

Pictogram(s):



H- Statements:	H222 H229	Extremely flammable aerosol. Pressurised container: may burst if heated.
P-Statements:	P210 P211 P251 P261 P410+412 P501	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurised container: Do not pierce or burn, even after use. Avoid breathing vapour/spray. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Dispose of contents/container in accordance with national regulations.

2.3 Other hazards:

In use, may form flammable / explosive vapour-air mixture.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous components

Chemical Name	CAS No./ EC No./ Reg. No	Classification (1272/2008/EC)	Content
ETHANOL	64-17-5 200-578-6 01-2119457610-43-xxxx	Flam. Liq. 2; H225	10-30%
BUTANE/ISOBUTANE	106-97-8 203-448-7 01-2119474691-32	Flam.Gas 1; H220	5-10%
2-BUTOXYETHANOL	111-76-2 203-905-0 01-2119475108-36-xxxx	Acute Tox.4; H302 Acute Tox.4; H312 Acute Tox.4; H332 Sk.Irrit.2; H315 Eye Irrit.2; H319	1-5%
METHANOL	67-56-1 200-659-6 01-2119433307-44-xxxx	Flam. Liq. 2; H225 Acute Tox.3; H301 Acute Tox.3; H311 Acute Tox.3; H331 STOT SE1; H370	<1%

See Section 16 for the full text of the H-statements noted above.

(1272/2008/EC: Classification, Labelling and Packaging of Substances and Mixtures (CLP) Regulation).

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Remove casualty from exposure ensuring one's own safety whilst doing so. Take off any contaminated clothing and shoes/boots immediately. Never give anything by mouth to an unconscious person.

Skin contact: Wash with soap and water. Seek medical advice if irritation develops.

Eye contact: Rinse with water for 10 minutes and seek medical advice if irritation persists.

Ingestion: Rinse mouth with water and give water to drink. Do not induce vomiting. Seek medical advice.

Inhalation: Remove to fresh air. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed: May cause irritation to skin and eyes with prolonged contact.

4.3 Indication of any immediate medical attention and special treatment needed: See skin and eye contact information above.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide; dry chemical powder; alcohol or polymer foam.
 Unsuitable extinguishing media: High volume water jet

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5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: Irritating/toxic fumes may be released at elevated temperatures.

5.3 Advice for fire-fighters:

Special protective equipment: Wear self-contained breathing apparatus. Use personal protective equipment.

Further information: Standard procedure for chemical fires. Use water spray to cool containers.
Do not allow fire run-off to enter drains.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Use personal protective equipment to deal with spillage.

6.2 Environmental precautions

Contain the spillage using sufficient appropriate absorbent material. Do not discharge into drains or rivers, but if contamination to waterways has occurred, inform local authorities.

6.3 Methods and materials for containment and cleaning up

Wipe up liquid spillage with absorbent material such as sand, earth, or vermiculite, and place in a labelled container for disposal in accordance with local/national regulations.

6.4 References to other sections: See sections 8 and 13 for personal protection and disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Handle with care.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well ventilated area, below 50°C. Protect from frost, heat and sunlight. Keep away from food, drink and animal feed.

7.3 Specific end use(s): No information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Chemical name	8hr TWA	15min STEL	Reference
Ethanol	1920 mg/m ³ /1000 ppm	-	EH40/2005
Methanol	266 mg/m ³ / 200ppm	333 mg/m ³ / 250ppm (Sk)	EH40/2005
2-Butoxyethanol	123 mg/m ³ / 25ppm	246 mg/m ³ / 50ppm (Sk) (BMGV)	EH40/2005
Butane/Isobutane	1450 mg m ³ /600ppm	1250 mg/m ³ /500 ppm	EH40/2005

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8.2 Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Personal protective equipment

Respiratory protection: Given the product usage, unlikely to be necessary.

Hand protection: PVC, Neoprene or Nitrile Rubber gloves approved to EN374 standard; check with glove manufacturer for specific advice. Gloves should only be worn on clean hands. Replace worn gloves. Wash and dry gloves after use. (Sk) noted above means can be absorbed through skin.

Eye protection: Chemical splash goggles and/or face shield approved to EN166 should be worn.

Skin and body protection: Protective overalls. The selected protective clothing has to satisfy the standard EN 13034, which describes clothing offering limited 8 hour protection against splashes.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practices. Do not eat or drink whilst using the product. Wash hands before breaks and at the end of the work day. Wash contaminated clothing before re-use.

Environmental exposure controls: Do not discharge into drains or rivers.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

State and colour	Aerosol emitting a colourless spray.
Odour	Alcoholic/floral
Odour Threshold	No data available
Flammability	Extremely flammable
Flash point	-40°C
Lower explosion limit	0.8%
Upper explosion limit	19.0%
Explosive properties	Not explosive
Thermal decomposition	No data available
Auto-ignition temperature	No data available
Oxidising properties	Non-oxidising
Solubility in water	Miscible
Solubility in other solvents	Soluble in acetone.
pH	No data available
Melting point/range	No data available
Boiling point/range	No data available
Density	0.94 (of liquid material)
Vapour pressure	No data available
Vapour density	No data available
Partition coefficient: n-octanol/water	No data available
Viscosity (kinematic)	No data available
Evaporation rate	No data available

9.2 Other information No data available

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10. STABILITY AND REACTIVITY

- 10.1 Reactivity** Generally non-reactive.
- 10.2 Chemical stability** Stable under normal conditions.
- 10.3 Possibility of hazardous reactions** None if stored and used as directed.
- 10.4 Conditions to avoid** None known.
- 10.5 Incompatible materials** Strong oxidising agents.
- 10.6 Hazardous decomposition products** Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Chemical name	Oral (LD50)	Inhalation (LC50)	Dermal (LD50)
Ethanol	>2000 mg/kg (Rat)	>20mg/l (Mouse) 4h	>2000 mg/kg (Rabbit)
Methanol	>2000 mg/kg (Rat)	>20mg/l (Rat) 4h	>2000 mg/kg (Rabbit)
2-Butoxyethanol	300-2000mg/kg (Rat)	No data available	1000-2000 mg/kg (Rat)
Butane/Isobutane	Not applicable	>20mg/l (Rat) 4h	Not applicable

Skin corrosion/irritation:

Ethanol: Not classed as a skin irritant
 Methanol: Classed as a skin irritant.
 2-Butoxyethanol: Classed as a skin irritant.

Serious eye damage/eye irritation:

Ethanol: May cause transient eye irritation.
 Methanol: May cause transient eye irritation.
 2-Butoxyethanol: Classed as an eye irritant.

Respiratory or skin sensitisation:

Ethanol: Not classed as a respiratory irritant or skin sensitiser.
 Methanol: Not classed as a respiratory irritant or skin sensitiser.
 2-Butoxyethanol: Not classed as a respiratory irritant or skin sensitiser.

Repeated dose toxicity:

Ethanol: No data available
 Methanol: No data available
 2-Butoxyethanol: No data available.

Carcinogenicity:

Ethanol: Not carcinogenic.
 Methanol: Not carcinogenic.
 2-Butoxyethanol: Not carcinogenic.

Mutagenicity:

Ethanol: Not mutagenic.
 Methanol: Not mutagenic.
 2-Butoxyethanol: Not mutagenic.

Toxicity for reproduction:

Ethanol: Not expected to impair fertility.
 Methanol: Not expected to impair fertility.
 2-Butoxyethanol: Not expected to impair fertility.

Specific target organ toxicity (STOT):

Ethanol: No data available
 Methanol: No data available.
 2-Butoxyethanol: No data available.

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12. ECOLOGICAL INFORMATION

12.1 Toxicity

Chemical name	Species	Test	Value
Ethanol	Daphnia	EC50	>100 mg/l
	Fish	LC50	>100 mg/l
	Algae	EC50	>100 mg/l
Methanol	Daphnia	EC50	>100 mg/l
	Fish	LC50	>100 mg/l
	Algae	EC50	>100 mg/l
2-Butoxyethanol	Daphnia	EC50	>100 mg/l
	Fish	LC50	>100 mg/l
	Algae	EC50	>100 mg/l

12.2 Persistence and degradability

Ethanol: >70% biodegradable.
 Methanol: >60% biodegradable.
 2-Butoxyethanol: >70% biodegradable.

12.3 Bioaccumulative potential

Ethanol: No bioaccumulation expected.
 Methanol: No bioaccumulation expected.
 2-Butoxyethanol: No data available.

12.4 Mobility in soil

Ethanol: No data available.
 Methanol: No data available.
 2-Butoxyethanol: No data available.

12.5 Results of PBT and vPvB assessment

Ethanol: Not considered to be PBT or vPvB.
 Methanol: Not considered to be PBT or vPvB.
 2-Butoxyethanol: Not considered to be PBT or vPvB.

12.6 Other adverse effects

Ethanol: None known.
 Methanol: None known.
 2-Butoxyethanol: No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal operations: Dispose of in accordance with local and national regulations.
 Contact licensed waste disposal company. Most aerosols can be recycled.
 Do not pierce or burn or use a cutting torch on the empty aerosol container.

14. TRANSPORT INFORMATION

General Information: The UN number for all aerosols is 1950. Aerosols packed in fibreboard cartons up to 30 kg gross weight, or shrink/stretch wrapped onto trays up to 20 kg gross weight may be transported as Limited Quantities, and should display the following symbol on the pack:



The following information relates to all other aerosols not transported as Limited Quantities:

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14.1 UN number: ADR/RID/ADN; IMDG; ICAO: 1950

14.2 UN proper shipping name: AEROSOLS

14.3 Transport hazard class(es): ADR/RID/ADN Class: 2, 5F

ADR/RID/ADN Class: Class 2, Gases

ADR Label No.: 2.1

IMDG Class: 2

ICAO Class/Division: 2

ICAO Subsidiary risk: 2.1



Transport labels

14.4 Packing Group: ADR/RID/ADN; IMDG; ICAO: Not applicable for aerosols

14.5 Environment hazards: Marine Pollutant: Not applicable for aerosols.

14.6 Special precautions for user: EMS: F-D,S-U

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable for aerosols.

15. REGULATORY INFORMATION

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

UK Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2001 No.2677) with amendments.

EU Directives

Regulations (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. Regulation EU 453/2010 amending Regulation (EC) No 1907/2006.

Statutory Instruments

The Chemicals (Hazard information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Guidance Notes

Health and Safety Executive Workplace Exposure Limits EH40.

Volatile Organic Compounds (VOC) content: 318 g/l. (Directive 1999/13/EC).

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been performed on this product.

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16. OTHER INFORMATION

This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006 (REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals) as amended and Regulation EU 453/2010.

Tariff number: 34039100.

Full text of H-statements referred to under sections 2 and 3

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H370 Causes damage to organs.

Abbreviations and acronyms

- CAS: Chemical Abstract Service (division of the American Chemical Society). {Section 3}.
- STOT: Single Target Organ Toxicity (Section 11).
- TWA: Time-weighted average. (Section 8).
- STEL: Short-term exposure limit. (Section 8).
- PBT: Persistent, Bioaccumulative, Toxic. (Section 12).
- vPvB: very Persistent and very Bioaccumulative. (Section 12).
- EC50: Effective Concentration, 50 percent. (Section 12).
- LC50: Lethal Concentration, 50 percent. (Section 11/12).
- LD50: Lethal Dose, 50 percent. (Section 11).

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.

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