

Molecule 13

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

1.1 Product Identifier

Material name : Molecule 13

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

Product use : Dismantling fluid for rusty nuts, bolts and fittings.

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 8.30 – 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	Flammable Aerosol Category 1; H222; H229
Human health	STOT SE3; H336; EUH066
Environment	Aq.Chron. 3; H412

2.2 Label elements

Labelling according to EC Directives: 1272/2008/EC

Signal word: Danger

Contains: White Spirit, Acetone

Pictogram(s):



Hazard	H222	Extremely flammable aerosol.
Statements:	H229	Pressurised container: May burst if heated.
	H336	May cause drowsiness or dizziness.
	EUH066	Repeated exposure may cause skin dryness or cracking.
	H412	Harmful to aquatic life with long lasting effects.

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.
	P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C.
	P261	Avoid breathing vapour/spray.
	P271	Use only outdoors or in a well-ventilated area.

Precautionary Statements (continued):

P273	Avoid release to the environment.
P280	Wear protective gloves.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of container in accordance with local/national regulations.

2.3 Other hazards: In use, may form flammable / explosive vapour-air mixture.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous components

Chemical Name	CAS No./ EC No./ Reg. No	Classification (1272/2008/EC)	Content
WHITE SPIRIT	64742-82-1 919-446-0 01-2119458049-33-xxxx	Flam. Liq. 3; H226 STOT SE 3; H336i Asp. Tox. 1; H304 Aq. Chron. 2; H411	30-50%
ACETONE	67-64-1 200-662-2 01-2119471330-49-xxxx	Flam.Liq. 2; H225 Eye Irrit. 2; H319 STOT SE3; H336, EUH066	10-30%
LIQUEFIED PETROLEUM GAS (contains <0.1% 1,3-butadiene)	68476-85-7 270-704-2 -	Flam.Gas 1; H220 Gas under pressure; H280	10-30%

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

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

Do not breathe spray mist. 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. Incompatible with oxidising agents. 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
Acetone	1210 mg/m ³ /500 ppm	3620 mg/m ³ /1500ppm	EH40/2005
White spirit	1200 mg/m ³	-	Manufacturer
Liquefied petroleum gas	1750 mg/m ³ /1000ppm	2810 mg/m ³ /1250 ppm	EH40/2005

DNEL (workers)	Acetone	White spirit	Reference
Chronic systemic effects (inhalation)	1210 mg/m ³	330 mg/m ³	Manufacturer
Chronic local effects (inhalation)	2420 mg/m ³	44 mg/kg bw/day	Manufacturer

DNEL (consumers)	Acetone	White spirit	Reference
Chronic systemic effects (inhalation)	200 mg/m ³	71 mg/m ³	Manufacturer
Chronic local effects (inhalation)	-	26 mg/kg bw/day	Manufacturer

PNEC: No information available.

8.2 Exposure controls

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

Personal protective equipment

Respiratory protection: If Workplace Exposure Limit(s) listed above are exceeded, respiratory protection may be required, in which case use respirators fitted with organic vapour filters.

Hand protection: Chemically-resistant gloves; check with glove manufacturer for specific advice.

Eye protection: Tightly-fitting safety goggles.

Skin and body protection: Protective overalls.

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 pale straw coloured spray.
Odour	Characteristic
Odour Threshold	No data available
Flammability	Extremely flammable
Flash point	-40°C
Lower explosion limit	0.8%
Upper explosion limit	13.0%
Explosive properties	Not explosive
Thermal decomposition	No data available
Auto-ignition temperature	No data available

9.1 Information on basic physical and chemical properties (continued)

Oxidising properties	Non-oxidising
Solubility in water	Slightly soluble
Solubility in other solvents	Soluble in alcohols.
pH	Not applicable
Melting point/range	No data available
Boiling point/range	No data available
Relative density	0.8 g/cm ³ @ 20°C (of liquid material)
Vapour pressure	No data available
Vapour density	No data available
Partition coefficient: n-octanol/water	No data available
Viscosity (kinematic)	Non-viscous (liquid material)
Evaporation rate	No data available

9.2 Other information No data available

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. Strong alkalis.
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)
White spirit	>15000 mg/kg (Rat)	>1.58 mg/l (Rat) 4h	>3400 mg/kg (Rabbit)
Acetone	5800 mg/kg (Rat)	>50100 mg/m ³ (Rat)	7426 mg/kg (Guinea pig)
Liquefied petroleum gas	Not applicable	>20mg/l (Rat) 4h	Not applicable

Skin corrosion/irritation:	Acetone:	Mild skin irritant.
Serious eye damage/eye irritation:	Acetone:	Serious eye irritant.
Respiratory or skin sensitisation:	Acetone:	Chronic exposure may cause dermatitis.
Repeated dose toxicity:		No data available
Carcinogenicity:		No known carcinogens.
Mutagenicity:		No data available
Toxicity for reproduction:		No data available
Specific target organ toxicity (STOT):		May cause drowsiness or dizziness.

Further information

The product as a whole may cause irritation of skin, eyes, nose and upper respiratory tract if exposed to high levels of spray mist.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Chemical name	Species	Test	Value
White spirit	Daphnia	EC50 48h	10-20 mg/l
	Rainbow trout	EC50 96h	10-30 mg/l
	Algae	EC50 72h	4.6-10 mg/l
Acetone	Daphnia	LC50 24h	13500 mg/l
	Rainbow trout	LC50 96h	5540 mg/l
	Algae	NOEC50 8h	530 mg/l/8 d

12.2 Persistence and degradability

Readily biodegradable.

12.3 Bioaccumulative potential

Not expected to bioaccumulate.

12.4 Mobility in soil

The product is slightly soluble in water and will partially migrate through and partially adsorb to soil.

12.5 Results of PBT and vPvB assessment

Contains no PBT or vPvB substances.

12.6 Other adverse effects

May be harmful to aquatic organisms if the liquid contents contaminate waterways.

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:

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

14. Transport information (continued)



	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.

Directive 1999/13/EC: Volatile Organic Compounds (VOC) content: 693 g/l.

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.

15.2 Chemical Safety Assessment

Chemical Safety Assessments/Reports (CSA/CSR) are not required for mixtures.

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).

Tariff number: 34039000

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 (CLP):

Physical hazards:	On basis of test data.
Health hazards:	Calculation method
Environmental hazards:	Calculation method

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

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure, may explode if heated.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336/H336i	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Abbreviations and acronyms

Asp: Aspiration (Section 3).
CAS: Chemical Abstract Service (division of the American Chemical Society). {Section 3}.
STOT: Single Target Organ Toxicity (Section 3 and 11).
TWA: Time-weighted average. (Section 8).
STEL: Short-term exposure limit. (Section 8).
DNEL: Derived no effect level – a level above which humans should not be exposed. (Section 8).
PBT: Persistent, Bioaccumulative, Toxic. (Section 12).
vPvB: very Persistent and very Bioaccumulative. (Section 12).
EC50: Effective Concentration, 50 percent. (Section 12).
IC50: Inhibition 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.