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Email: distributors@img-limited.co.uk
Industrial Maintenance Group Distributors
Riverside Industrial Estate
Fazeley, Tamworth
Staffordshire, B78 3RW

Bug Kill

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

1.1 Product Identifier
Material name : Bugkill

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

Product use : Insect killer

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 1; H222; H229
Human health	Not classified
Environment	Aq.Acute 1; H400; Aq.Chron.1; H410

2.2 Label elements
Labelling according to EC Directives: 1272/2008/EC
Signal word: Danger
Pictogram(s):


Hazard Statements:	H222	Extremely flammable aerosol.
	H229	Pressurised container: may burst if heated.
	H410	Very toxic 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	Pressurised container: Do not pierce or burn, even after use.
	P261	Avoid breathing spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves.
	P410+412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
	P501	Dispose of contents/container in accordance with local/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
BUTANE	106-97-8 203-448-7 01-2119474691-32	Flam.Gas 1; H220	50-100%
ISOBUTANE	75-28-5 200-857-2 -	Flam Gas 1; H220	10-25%
PROPANE	74-98-6 200-827-9 -	Flam.Gas 1; H220	10-25%
HYDROCARBONS C9-C11, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	- 919-857-5 01-2119463258-33	Flam.Liq.3; H226 Asp.1; H304 STOT SE3; H336 EUH066	10-25%
ETHANOL	64-17-5 200-578-6 01-2119457610-43-xxxx	Flam. Liq. 2; H225	2.5-10%
PIPERONYL BUTOXIDE	51-03-6 200-076-7	Aq.Acute 1; H400 Aq.Chron.1; H410	0-1%
D-TETRAMETHRIN	1166-46-7 214-619-0	Aq.Acute 1; H400 Aq.Chron.1; H410	0-1%
PERMETHRIN (ISO)	52645-53-1 258-067-9	Ac.Tox.4, H302, H332 Sk.Sens.1; H317 Aq.Acute 1; H400 Aq.Chron.1; H410	0-1%

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.

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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

Avoid contact with skin and eyes. Handle with care. Do not eat, drink or smoke whilst using this product. Do not spray on or near hot surfaces, naked flames, etc.

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.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Chemical name	8hr TWA	15min STEL	Comments	Reference
Butane/Isobutane	1450 mg/m^3/600ppm	1250 mg/m^3/500 ppm		EH40/2005
Propane	Asphyxiating	Asphyxiating		Supplier
Hydrocarbons C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	566 mg/m^3	850 mg/m^3	As Turpentine	EH40/2005
Ethanol	1920 mg/m^3 /1000 ppm	-		EH40/2005

DNEL:

DNEL (workers)	Hydrocarbons C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
Chronic local effects (dermal)	-
Chronic systemic effects (dermal)	128 mg/kg bw/day
Chronic local effects (inhalation)	-
Chronic systemic effects (inhalation)	871 mg/m^3

DNEL (consumers)	Hydrocarbons C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
Chronic systemic effects (oral, dermal)	125 mg/kg bw/day
Chronic systemic effects (inhalation)	185 mg/m^3

PNEC: No information available.

8.2 Exposure controls

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

Personal protective equipment

Respiratory protection: Unlikely to be necessary in normal usage.

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.

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.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

State and colour	Aerosol emitting a colourless spray.
Odour	Characteristic
Odour Threshold	No data available
Flammability	Extremely flammable
Flash point	<0°C
Lower explosion limit	0.8%
Upper explosion limit	9.0%
Explosive properties	Not explosive
Thermal decomposition	No data available
Auto-ignition temperature	No data available
Oxidising properties	Non-oxidising
Solubility in water	Partially soluble
Solubility in other solvents	Soluble in alcohols.
pH	Not applicable
Melting point/range	No data available
Boiling point/range	No data available
Density	No data available
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

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)
BUTANE/ISOBUTANE	Not applicable	>20mg/l (Rat) 4h	Not applicable
PIPERONYL BUTOXIDE	2000-5000 mg/kg (Rat)	>5.9 mg/l (Rat)	2000-5000 mg/kg (Rabbit)

Skin corrosion/irritation:	Not classed as a skin irritant.
Serious eye damage/eye irritation:	Not classed as an eye irritant.
Respiratory or skin sensitisation:	Not classed as a respiratory irritant or skin sensitiser.
Repeated dose toxicity:	No data available.
Carcinogenicity:	Not carcinogenic.
Mutagenicity:	Not mutagenic.
Toxicity for reproduction:	Not expected to impair fertility.
Specific target organ toxicity (STOT):	No data available.
Further information:	No data available.

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12. ECOLOGICAL INFORMATION

12.1 Toxicity

Chemical name	Species	Test	Value
HYDROCARBONS C9-C11, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	Daphnia Fish Algae	NOEC NOEC NOEC 72h	0.23 mg/l 0.131 mg/l 100 mg/l
PIPERONYL BUTOXIDE	Daphnia Fish Algae	EC50 LC50 96h ECr50 72h	0.1-1 mg/l (M=1) >3mg/l >2 mg/l
D-TETRAMETHRIN	Fish	LC50 96h	0.01 mg/l (M=100)
PERMETHRIN (ISO)	Daphnia	EC50	<0.001 mg/l (M=100)

12.2 Persistence and degradability Piperonyl butoxide, d-Tetramethrin and Permethrin are not rapidly biodegradable; the solvents and propellants are biodegradable.

12.3 Bioaccumulative potential No data available.

12.4 Mobility in soil Partially soluble in water.

12.5 Results of PBT and vPvB assessment No data available.

12.6 Other adverse effects Very toxic to aquatic life with long lasting effects.

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

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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.

15.2 Chemical Safety Assessment

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

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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: 38089110

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.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: may burst if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

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)
DNEL: Derived No Effect Level (Section 8).
PNEC: Predicted No Effect Concentration (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.