

Current Flow

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

1.1 Product Identifier

Material name : Current Flow Aerosol

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

Product use : Electrical cleaner and degreaser.

1.3 Details of the supplier of the safety data sheet

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

Classification 1272/2008/EC	Physical and Chemical Hazards	Flammable Aerosol Category 1; H222; H229
	Human health	Sk.Irrit.2; H315; Eye Irrit.2; H319; STOT SE3; H336
	Environment	Aq.Chron. 2; H411

2.2 Label elements

Signal word: Danger
Hazard Pictogram(s): **Contains:** Hydrocarbons, C6, Isoalkanes, <5% n-Hexane; Propan-2-ol; Acetone



Hazard Statements:

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurized container: Do not pierce or burn even after use.
P410+412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P271	Use only outdoors or in a well ventilated area.

Precautionary Statements (continued):	P273	Do not release to the environment.
	P280	Wear protective gloves/eye/face protection.
	P302+352	IF ON SKIN: Wash with plenty of water.
	P332+313	If skin irritation occurs: Get medical advice/attention.
	P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
	P337+313	If eye irritation persists get medical advice/attention.
	P501	Dispose of contents/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
HYDROCARBONS, C6, ISOALKANES, <5% n-HEXANE	64742-49-0 931-254-9 01-2119484651-34-xxxx	Asp. Tox. 1; H304 Flam. Liq. 2; H225 STOT SE 3; H336 Skin Irrit. 2; H315 Aquatic Acute 2; H401 Aquatic Chronic 2; H411	30-50%
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%
PROPAN-2-OL	67-63-0 200-661-7 01-2119457558-25-xxxx	Flam.Liq.2; H225 Eye Irrit.2; H319 STOT SE3; H336	1-10%
ACETONE	67-64-1 200-662-2 01-2119471330-49-xxxx	Flam.Liq. 2; H225 Eye Irrit. 2; H319 STOT SE3; H336, EUH066	1-10%

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

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. 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
Hydrocarbons, C6, isoalkanes, <5% n-hexane	1400 mg/m ³ /362 ppm	-	Manufacturer
Liquefied petroleum gas	1750 mg/m ³ /1000ppm	2810 mg/m ³ /1250 ppm	EH40/2005
Propan-2-ol	999 mg/m ³ /400 ppm	1250 mg/m ³ /500 ppm	EH40/2005
Acetone	1210 mg/m ³ /500 ppm	3620 mg/m ³ /1500ppm	EH40/2005

DNEL (workers)	Hydrocarbons, C6, isoalkanes, <5% n-hexane	Propan-2-ol	Reference
Chronic systemic effects (dermal)	13964 mg/kg bw/day	888 mg/kg bw/day	Manufacturer
Chronic systemic effects (inhalation)	5306 mg/m ³	500 mg/m ³	Manufacturer

DNEL (consumers)	Hydrocarbons, C6, isoalkanes, <5% n-hexane	Propan-2-ol	Reference
Chronic systemic effects (dermal)	1377 mg/kg bw/day	319 mg/kg/day	Manufacturer
Chronic local effects (inhalation)	1137 mg/m ³	89 mg/m ³	Manufacturer

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 circumstances; if vapour levels are high, wear a respirator conforming to EN 140 with type A filter or better.

Hand protection: Wear chemically resistant gloves such as butyl rubber approved to standard EN 374; material thickness 0.5mm; break through time \geq 480 min. Gloves must be replaced after 8 hours of wear. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Check with glove manufacturer for specific advice.

Eye protection: Chemical splash goggles and/or face shield should be worn. The selected goggles or glasses must satisfy the European standard EN 166.

Skin and body protection: Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. The selected protective clothing has to satisfy the standard EN 13034, which describes clothing offering limited 8 hour protection against splashes. Use PPE that is chemically resistant to the product and prevents skin contact.

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 colourless spray.
Odour	Characteristic
Odour Threshold	No data available
Flammability	Extremely flammable
Flash point	<0°C
Lower explosion limit	0.8%
Upper explosion limit	13.0%
Explosive properties	Not explosive
Thermal decomposition	No data available
Auto-ignition temperature	>230°C
Oxidising properties	Non-oxidising
Solubility in water	Slightly soluble
Solubility in other solvents	Soluble in most organic solvents.
pH	Not applicable
Melting point/range	No data available
Boiling point/range	No data available
Relative density	0.8 @ 20°C (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 acids. Strong bases.
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)
Hydrocarbons, C6, isoalkanes, <5% n-hexane	>5840 mg/kg (Rat)	>25.2 mg/l (Rat) 4h	>2920 mg/kg (Rabbit)
Liquefied petroleum gas	Not applicable	>20mg/l (Rat) 4h	Not applicable
Propan-2-ol	>2000 mg/kg (Rat)	No data available	>2000 mg/kg (Rabbit)
Acetone	5800 mg/kg (Rat)	>50100 mg/m ³ (Rat)	7426 mg/kg (Guinea pig)

Skin corrosion/irritation:

C6 Hydrocarbon: Moderately irritating with prolonged exposure.
 Propan-2-ol: Not classed as a skin irritant.
 Acetone: Mild skin irritant.

Serious eye damage/eye irritation:

C6 Hydrocarbon: May cause mild, transient discomfort.
 Propan-2-ol: Causes eye irritation.
 Acetone: Serious eye irritant.

Respiratory or skin sensitisation:

C6 Hydrocarbon: Not expected to be a sensitiser.
 Propan-2-ol: Not classed as a respiratory or skin sensitizer.
 Acetone: Chronic exposure may cause dermatitis.

Repeated dose toxicity:

C6 Hydrocarbon: Not expected to be a hazard.
 Propan-2-ol: Tests on rats over prolonged periods have shown both weight gains and losses, increased weight of the liver and some liver damage.
 Acetone: No data available

Carcinogenicity:

C6 Hydrocarbon: Not carcinogenic.
 Propan-2-ol: Not carcinogenic
 Acetone: Not carcinogenic

Mutagenicity:

C6 Hydrocarbon: Not mutagenic.
 Propan-2-ol: Not mutagenic
 Acetone: No data available

Toxicity for reproduction:

C6 Hydrocarbon: Not expected to be a hazard.
 Propan-2-ol: Not toxic for reproduction.
 Acetone: No data available

Specific target organ toxicity (STOT):

C6 Hydrocarbon: May cause drowsiness or dizziness.
 Propan-2-ol: vapour in high concentrations can cause irritation of the respiratory system and eyes; drowsiness and dizziness. Ingestion can cause nausea and vomiting at higher doses.
 Acetone: 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
Hydrocarbons, C6, isoalkanes, <5% n-hexane	Daphnia	EC50 48h	3 mg/l
	Rainbow trout	LL50 96h	>13.4 mg/l
	Algae	EC50 72h	29 mg/l
Propan-2-ol	Daphnia	EC50 48h	>100 mg/l
	Golden ide	LC50 48h	>100 mg/l
	Algae	EC50 72h	>100 mg/l
Acetone	Daphnia	EL0 48h	1000 mg/l
	Rainbow trout	LL0 96h	1000 mg/l
	Algae	EL0 72h	1000 mg/l

12.2 Persistence and degradability

C6 Hydrocarbon: Expected to be readily biodegradable.
 Propan-2-ol and Acetone: Readily biodegradable.

12.3 Bioaccumulative potential

C6 Hydrocarbon: Not determined.
 Propan-2-ol and Acetone: Not expected to bioaccumulate.

12.4 Mobility in soil

C6 Hydrocarbon: Highly volatile, will partition rapidly to air.
 Not expected to partition to sediment and wastewater.
 Propan-2-ol and Acetone: soluble in water and migrate through soil.

12.5 Results of PBT and vPvB assessment

C6 Hydrocarbon, Propan-2-ol and Acetone: Contain no PBT or vPvB substances.

12.6 Other adverse effects

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

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.

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: 696 g/l. (Directive 1999/13/EC)

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) as amended, and Regulation EU 453/2010.

Tariff number: 38140090

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.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure, may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H401	Toxic to aquatic life.
H411	Toxic 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).
LC50:	Lethal Concentration, 50 percent. (Section 11/12).
LD50:	Lethal Dose, 50 percent. (Section 11).
LL50:	Lethal Load, 50 percent (Section 12).

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.