

SAFETY DATA SHEET

Revision: 1.1 Date: 09.05.2016

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH),
1272/2008 (CLP) & 453/2010



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M-Line GC-6

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

1.1 Product identifier	
Product Name	M-Line GC-6 – Isopropyl Alcohol
Chemical Name	Mixture
CAS No.	Mixture
EINECS No.	Mixture
REACH Registration No.	None assigned.
1.2 Recommended use of the chemical and restrictions on use	
Identified Use(s)	PC14 Metal surface treatment products, including galvanic and electroplating products
Uses Advised Against	None known.
1.3 Supplier's details	
Company Identification	Vishay Measurements Group, Inc. Post Office Box 27777 Raleigh, NC 27611 USA
Telephone	919-365-3800
Fax	919-365-3945
E-Mail (competent person)	mm.us@vishaypg.com
1.4 Emergency Phone No.	1-800-424-9300 (U.S.) 703-527-3887 (Outside U.S.) CHEMTREC

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
2.1.1 GHS Classification	Flam. Liq. 2; Highly flammable liquid and vapour. Eye Irrit. 2; Causes serious eye irritation. STOT SE 3; Specific target organ toxicity — single exposure 3 (Inhalation and Oral)
2.2 Label elements	According to GHS Classification
Product Name	M-Line GC-6
Hazard Pictogram(s)	 
Signal Word(s)	Danger
Hazard Statement(s)	H225: Flammable liquid and vapour. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness.
Precautionary Statement(s)	P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P261: Avoid breathing vapours. P280: Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P337+P313: If eye irritation persists: Get medical advice/attention.
P308+P313: IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards None.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

GHS Classification

Chemical identity of the substance	%W/W	CAS No.	EC No.	Hazard Statement(s)
propan-2-ol	100	67-63-0	200-661-7	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336

3.2 Mixtures Not applicable.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Obtain medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

4.2 Most important symptoms and effects, both acute and delayed

May cause drowsiness or dizziness. May produce an allergic reaction in persons already sensitised. Causes irritation to eyes and skin.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable extinguishing Media

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide. Prevent liquid entering sewers, basements and workpits; vapour may create explosive atmosphere. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

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6. SECTION 6: ACCIDENTAL RELEASE MEASURES

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|-----|--|--|
| 6.1 | Personal precautions, protective equipment and emergency procedures | Ensure adequate ventilation. Shut off leaks if without risk. Eliminate sources of ignition. Avoid breathing vapours. Wear protective gloves/protective clothing/eye protection/face protection. |
| 6.2 | Environmental precautions | Do not allow to enter drains, sewers or watercourses. |
| 6.3 | Methods and material for containment and cleaning up | Use non-sparking equipment when picking up flammable spill. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Dispose of this material and its container as hazardous waste. |
| 6.4 | Reference to other sections | See Section: 8, 13 |

7. SECTION 7: HANDLING AND STORAGE

- | | | |
|-----|---|--|
| 7.1 | Precautions for safe handling | Ensure adequate ventilation. Do not breathe vapour. In case of inadequate ventilation wear respiratory protection. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. |
| 7.2 | Conditions for safe storage, including any incompatibilities | Ground/bond container and receiving equipment. Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, sources of ignition and direct sunlight. |
| | Storage temperature | Ambient. 5 - 25°C |
| | Storage life | Stable under normal conditions. |
| | Incompatible materials | Keep away from: Flammable liquid, Oxidizing agents, Corrosive Substances, Alcohols. |
| 7.3 | Specific end use(s) | See Section:1.2 |

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters
8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Propan-2-ol	67-63-0	400	980	500	1225	NIOSH.1
		400	980			OSHA

Note: NIOSH: National Institute for Occupational Safety and Health. OSHA: Occupational Safety and Health Standards. 1: 15 minutes average value

- 8.1.2 Biological limit value Not established.

- 8.1.3 PNECs and DNELs

DNEL (Propan-2-ol)	Oral	Inhalation	Dermal
Industry - Long Term - Systemic effects	-	500 mg/m³	888 mg/kg bw/day
Consumer - Long Term - Systemic effects	26 mg/kg bw/day	89 mg/m³	319 mg/kg bw/day

PNEC	Propan-2-ol
Aquatic Compartment	PNEC aqua (freshwater / marine water / intermittent releases) 140.9 mg/L PNEC STP 2251 mg/L PNEC sediment (freshwater/marine water) 552 mg/kg sediment dw PNEC oral 160 mg/kg food
Terrestrial Compartment	PNEC soil 28 mg/kg soil dw




- 8.2 Exposure controls

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8.2.1	Appropriate engineering controls	Ensure adequate ventilation. Atmospheric levels should be controlled in compliance with the occupational exposure limit.
8.2.2	Individual protection measures, such as personal protective equipment (PPE)	Use personal protective equipment as required. Wash contaminated clothing before reuse. Avoid contact with skin and eyes.
	Eye/face protection	Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).
		
	Skin protection	Wear impervious gloves (EN374). Nitrile rubber, Butyl rubber. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Unsuitable gloves materials: Natural rubber / PVC.
		
	Respiratory protection	Normally no personal respiratory protection is necessary. In case of inadequate ventilation wear respiratory protection. A suitable mask with filter type A (EN141 or EN405) may be appropriate.
		
	Thermal hazards	Not applicable.
8.2.3	Environmental Exposure Controls	Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties	Physico-chemical properties of substance Propan-2-ol.
	Appearance	Blue Coloured liquid.
	Odour	Alcohol-like Odour
	Odour Threshold	Not available.
	pH	Not established.
	Melting Point/Freezing Point	-88.5°C
	Initial boiling point and boiling range	82.3°C (Mixture)
	Flash point	11.7 °C °C
	Evaporation Rate	2.83 (BuAc = 1)
	Flammability (solid, gas)	Flam. Liq. 2; Flammable liquid and vapour.
	Upper/lower flammability or explosive limits	Not available.
	Vapour pressure	6.02 kPa at 25°C
	Vapour density	2.1 (Air = 1)
	Relative density	0.78 (H2O = 1)
	Solubility(ies)	98% (Water)
	Partition coefficient: n-octanol/water	0.05 log Pow (25 °C)
	Auto-ignition temperature	399 °C
	Decomposition Temperature	Not available.
	Viscosity	2.038 mPa s (dynamic) 25 °C
	Explosive properties	Not available.
	Oxidising properties	Not oxidising.
9.2	Other information	None.

10. SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	Stable under normal conditions.
10.2	Chemical stability	Stable under normal conditions.

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10.3	Possibility of hazardous reactions	Highly flammable liquid and vapour. The vapour may be invisible, heavier than air and spread along ground.
10.4	Conditions to avoid	Keep away from heat, sources of ignition and direct sunlight.
10.5	Incompatible materials	Flammable liquid, Oxidizing agents, Corrosive Substances, Alcohols, Strong Acids and Alkalis.
10.6	Hazardous decomposition product(s)	May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Ingestion

May cause drowsiness and dizziness.

Inhalation

May cause drowsiness and dizziness.

Skin Contact

Not classified.

Eye Contact

Eye Irrit. 2

skin corrosion/irritation

Eye Irrit. 2; Moderate irritant to rabbit eyes.

Serious eye damage/irritation

Not classified.

Respiratory or skin sensitization

Not classified.

Germ cell mutagenicity

There is no evidence of mutagenic potential.

Carcinogenicity

No evidence of carcinogenicity.

Reproductive toxicity

Not classified.

STOT - single exposure

Not classified.

STOT - repeated exposure

Not classified.

Aspiration hazard

Not classified.

11.2 Other information

None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Not classified as a Marine Pollutant.
12.2	Persistence and degradability	Readily biodegradable.
12.3	Bioaccumulative potential	The product has low potential for bioaccumulation.
12.4	Mobility in soil	The product is predicted to have high mobility in soil. Water Soluble.
12.5	Results of PBT and VPVB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	This material and its container must be disposed of as hazardous waste. (2001/118EC). Send after pre-treatment to a appropriate hazardous waste incinerator facility according to legislation.
13.2	Additional Information	Dispose of contents in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

	ADR/RID / IMDG / IATA	
14.1	UN number	UN 1219
14.2	Proper Shipping Name	ISOPROPANOL (ISOPRPYL ALCOHOL)
14.3	Transport hazard class(es)	3
14.4	Packing group	II
14.5	Environmental hazards	Not classified as a Marine Pollutant.
14.6	Special precautions for user	Causes serious eye irritation.
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
14.8	Additional Information	None.

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15. SECTION 15: REGULATORY INFORMATION

- | | | |
|------|--|---|
| 15.1 | Safety, health and environmental regulations/legislation specific for the substance or mixture | Propan-2-ol - Seveso Substances Category 7b |
| 15.2 | Chemical Safety Assessment | Not available. |

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

References: Existing Safety Data Sheet (SDS) and Existing ECHA registration(s) for Propan-2-ol (CAS# 1330-20-7).

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Flam. Liq. 2; H226	Harmonised Classification
Eye Irrit. 2; H319	Harmonised Classification
STOT SE 3; H336	Harmonised Classification

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	vPvT: very Persistent and very Toxic
OECD	Organisation for Economic Cooperation and Development
NTP	National Toxicology Program
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Standards

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Annex to the extended Safety Data Sheet (eSDS)

No information available.