

M-LINE GC-6 Isopropyl Alcohol

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ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830 AS AMENDED BY UK REACH REGULATIONS Sì 2019/758

Date of issue: 11/04/2025 Version: 4.0

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

1.1 Product identifier

> Product name M-LINE GC-6 Isopropyl Alcohol

Mixture CAS No.

Relevant identified uses of the substance or mixture 1.2

and uses advised against

Identified Use(s) PC14 Metal surface treatment products, including galvanic and electroplating

products

None Known Uses advised against

1.3 Details of the supplier of the safety data sheet

> VISHAY MEASUREMENTS GROUP UK LTD Company Identification

> > Stroudley Road Basingstoke Hampshire **RG24 8FW** United Kingdom

Telephone +44 (0) 1256 462131 Fax +44 (0) 1256 471441 E-mail (competent person) mm.uk@vpgsensors.com

1.4 Emergency telephone number

> National Poisons Information Service (United Kingdom) +44 (0) 3448 920111 24 hr. emergency phone number

Healthcare Professionals ONLY

NHS 24 Members of Public (00-1) 703-527-3887 CHEMTREC (24 hours) Emergency Phone No.

Languages spoken All official European languages.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 The retained CLP Regulation (EU) No 1272/2008, as

amended for Great Britain

Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3: H336

2.2 Label elements According to the retained CLP Regulation (EU) No 1272/2008, as amended for

Great Britain

Product name M-LINE GC-6 Isopropyl Alcohol

Contains: Propan-2-ol

Hazard Pictogram(s)





DANGER Signal Word(s)

Hazard Statement(s) H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

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Precautionary Statement(s) P210: Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking. P233: Keep container tightly closed.

P235: Keep cool.

P370+P378: In case of fire: Use dry powder to extinguish. P403+P235: Store in a well-ventilated place. Keep cool.

P501: Dispose of contents in accordance with local, state or national legislation.

Supplemental information None assigned

2.3 Other hazards Not classified as PBT or vPvB. Does not cause endocrine disruption. Vapours

can form explosive mixtures with air.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

SUBSTANCE	CAS No.	EC No.	REACH Registration No.	%W/W
Propan-2-ol	67-63-0	200-661-7	Not yet assigned in the supply chain	≤100

For full text of H phrases see section 16.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider Avoid breathing mist/vapours/spray. Ensure adequate ventilation. Wear suitable

protective clothing. Wear suitable respiratory protective equipment if exposure to high levels of material are likely. Avoid contact with skin. Contaminated clothing should be laundered before reuse. Do not use mouth-to-mouth resuscitation. Eyewash facilities should be stationed close to workplace where possible. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

Skin contact IF ON SKIN: Gently wash with plenty of soap and water. Remove contaminated

clothing and wash clothing before reuse. If irritation (redness, rash, blistering)

develops, get medical 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. Do not give anything by mouth to an

unconscious person. Do NOT induce vomiting. If symptoms occur obtain

medical attention.

4.2 Most important symptoms and effects, both acute

and delayed

Inhalation

Causes serious eye irritation. May cause drowsiness or dizziness.

4.3 Indication of any immediate medical attention and

special treatment needed

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media As appropriate for surrounding fire. Extinguish preferably with foam, carbon

dioxide or dry chemical.

Unsuitable extinguishing media Do not use water jet. Direct water jet may spread the fire.

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5.2 Special hazards arising from the substance or

Flammable liquid and vapour. Vapours can form explosive mixtures with air. Containers may explode when involved in a fire. Keep container(s) exposed to fire cool, by spraying with water. Thermal decomposition will evolve toxic and corrosive vapours: Carbon dioxide, Carbon monoxide lammable liquid and vapour. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback. Sealed containers may rupture explosively if

5.3 Advice for firefighters 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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Stop leak if safe to do so. Eliminate all ignition sources if safe to do so. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing mist/vapours/spray. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. See Section: 8. The vapour is heavier than air; beware of pits and confined spaces.

6.2 **Environmental precautions** Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.

6.3 Methods and material for containment and cleaning up

Ensure suitable personal protection during removal of spillages. Use nonsparking equipment when picking up flammable spill. Adsorb spillages onto sand, earth or any suitable adsorbent material. Do NOT absorb in saw-dust or other combustible absorbents. Transfer to a lidded container for disposal or recovery. Ventilate the area and wash spill site after material pick-up is complete. Dispose of this material and its container as hazardous waste. Allow

small spillages to evaporate provided there is adequate ventilation. Evacuate the area and keep personnel upwind. Notify police and fire brigade as

soon as possible. Reference to other sections See Section: 8, 13

Large spillages:

6.4

7.3

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling Ensure adequate ventilation. Avoid breathing mist/vapours/spray. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. See Section: 8. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Do not use sparking tools. Do not spray on an open flame or other ignition source. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Ground/bond container and receiving

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from direct sunlight. Do not reuse empty containers.

storage temperature Storage life

Specific end use(s)

Store in a cool/low temperature. Keep at a temperature not exceeding (°C): 17. Stable under normal conditions.

Incompatible materials Keep away from: Strong oxidising agents, Strong acids and alkali., Iron,

Aluminium, Air, Halogens, Peroxides.

See Section: 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

811 Occupational exposure limits

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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	999	500	1250	-

Source: WEL: Workplace Exposure Limit (UK HSE EH40)

8.1.2 Biological limit value Not established.

8.1.3 PNECs and DNELs Not applicable

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure adequate ventilation or use appropriate containment. Atmospheric levels should be controlled in compliance with the occupational exposure limit. Local exhaust recommended. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Eyewash facilities should be stationed close to workplace where possible.

8.2.2 Individual protection measures, such as personal protective equipment

Use personal protective equipment as required. Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe vapour. Wash hands before breaks and after work. Do not eat, drink or smoke at the work place.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/ face protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

Skin protection



Hand protection:

Wear impervious gloves (EN374). Nitrile rubber, Butyl rubber. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Recommended: Nitrile rubber, Butyl rubber.

Unsuitable gloves materials: Natural rubber / PVC.

Body protection:

Wear dustproof working clothes. Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

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 controlsAvoid release to the environment. Do not allow to enter drains, sewers or watercourses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Blue Liquid

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> Odour Alcohol-like. Odour threshold Not available Not established.

Melting point/freezing point -88.5 ℃ Initial boiling point and boiling range 82 °C Flash point 11.7 ℃

Evaporation rate 2.83 (BuAc = 1)Not applicable - Liquid Flammability (solid, gas)

Upper/lower flammability or explosive limits Upper explosion limit: 12.0 Vol% Lower explosion limit: 2.0 Vol%

Vapour pressure 6.02 kPa @ 25 ℃ Vapour density 2.1 (Air = 1)0.88 g/cm³ Relative density Solubility(ies) Soluble in water.

Partition coefficient: n-octanol/water Not established. Auto-ignition temperature 399 ℃ Decomposition temperature Not established.

Viscosity 2.1 mPa · s @ 25 ℃ Dynamic viscosity

Explosive properties Not explosive. Vapours can form explosive mixtures with air.

Oxidising properties Not oxidisina.

9.2 Other information None Known

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity Stable under normal conditions.

10.2 **Chemical stability** Stable under normal conditions. Hazardous polymerisation will not occur. 10.3

Possibility of hazardous reactions Highly flammable liquid and vapour. Vapour is explosive in air at temperatures

higher than the flash point. Vapours are heavier than air and may travel

considerable distances to a source of ignition and flashback. 10.4 Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Keep from direct sunlight. Do not spray on an open flame

or other ignition source. Take precautionary measures against static discharge. Flammable liquid, Oxidizing agents, Corrosive Substances, Alcohols, Strong

Incompatible materials Acids and Alkalis.

10.6 Hazardous decomposition products Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

10.5

Based upon the available data, the classification criteria are not met. **Acute toxicity - Ingestion**

LD50 (oral,rat) mg/kg: 58400 (OECD 401)

Acute toxicity - Inhalation Based upon the available data, the classification criteria are not met.

LC50 (inhalation,rat) mg/l/4h: 10000 (OECD 403)

Based upon the available data, the classification criteria are not met. Acute toxicity - Skin contact LD50 (Dermal, (rabbit)) ml/kg bw 16.4 (OECD 402)

Skin corrosion/irritation Based upon the available data, the classification criteria are not met.

Not irritating to skin (rabbit) ECHA registration dossier

Serious eye damage/irritation Eye Irrit. 2; Causes serious eye irritation.

Irritating to eyes. (rabbit) (OECD 405) ECHA registration dossier Based upon the available data, the classification criteria are not met. Respiratory or skin sensitisation

Skin sensitization: Sensitisation (guinea pig) - Negative (OECD 406) Respiratory sensitization: No data ECHA registration dossier

Germ cell mutagenicity Based upon the available data, the classification criteria are not met.

In vitro: Negative (Chinese Hamster ovary) (OECD 476)

In vivo: Negative (mouse) (OECD 474) ECHA registration dossier Based upon the available data, the classification criteria are not met. Carcinogenicity

NOEL 5000 ppm (OECD 451)

Reproductive toxicity Based upon the available data, the classification criteria are not met.

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STOT - single exposure

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> Reproductive toxicity: NOAEL: 1000 mg/kg bw/day (OECD 416) Developmental toxicity: NOAEL: 596 mg/kg bw/day (OECD 414)

ECHA registration dossier

STOT SE 3; May cause drowsiness or dizziness.

Test Result: Higher concentrations can produce central nervous system

depression, narcosis, and unconsciousness. (OECD 403)

ECHA registration dossier

STOT - repeated exposure Based upon the available data, the classification criteria are not met. Aspiration hazard Based upon the available data, the classification criteria are not met.

11.2 Other information None Known

SECTION 12: ECOLOGICAL INFORMATION

12.1 **Toxicity** Based upon the available data, the classification criteria are not met. Estimated Mixture LC50 >100 mg/l (Fish) 12.2 Persistence and degradability Readily biodegradable (according to OECD criteria). 12.3 Bioaccumulative potential The substance has low potential for bioaccumulation. Log Pow < 3. 12.4 Mobility in soil The substance is predicted to have high mobility in soil. Water Soluble. Log Pow: < 3. Readily biodegradable.

12.5 Results of PBT and vPvB assessment Not classified as PBT or vPvB.

12.6 Other adverse effects None Known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods This material and its container must be disposed of as hazardous waste. Dispose

of wastes in an approved waste disposal facility.

IMPC

Directive 2008/98/EC (Waste Framework Directive) HP3, HP4, HP5

13.2 Additional information Dispose of contents in accordance with local, state or national legislation.

A DD/DID

SECTION 14: TRANSPORT INFORMATION

		ADR/RID	INIDG	IA I A/ICAU	
14.1	UN number	UN 1219	UN 1219	UN 1219	
14.2	UN proper shipping name	ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)	
14.3	Transport hazard class(es)	3	3	3	
14.4	Packing group	II	II	II	
14.5	Environmental hazards	Not applicable	Not classified as a Marine Pollutant.	Not applicable	
14.6	Special precautions for user	See Section: 2			
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Pollution category: Z			
14.8	Additional information	Recommended: Road/R	Rail/Sea transport only.		

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental

> regulations/legislation specific for the substance or mixture

15.1.1 **EU** regulations

> Use restriction according to REACH annex XVII, no.: Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-

Directivel

Restrictions of occupation:

Not restricted P5c

Observe restrictions to employment for juvenils according to the 'juvenile work

protection guideline' (94/33/EC).

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Observe employment restrictions under the Maternity Protection Directive

(92/85/EEC) for expectant or nursing mothers.

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of

workers from the risks related to chemical agents at work

GB regulations

GB Mandatory classification and labelling list

Propan-2-ol: Listed

15.1.2 National regulations

Germany

To follow:

Water hazard class (WGK) Water hazard class: 1 (Self classification)

15.2 Chemical Safety Assessment A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Not applicable - V1.0

References:

Existing Safety Data Sheet (SDS), GB Mandatory classification and labelling list and Existing ECHA registration(s) for Propan-2-ol (CAS No. 1330-20-7)

Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830. Compiled in accordance with REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

Classification of the substance or mixture. The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain	Classification procedure
Flam. Liq. 2; H225	Physical and chemical properties / Harmonised
	Classification
Eye Irrit. 2; H319	Harmonised Classification
STOT SE 3: H336	Harmonised Classification

Legend

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

AND European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

BCF Bioconcentration factor (BCF)

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL Derived no effect level
EU European Union
EC European Community
ECHA European Chemicals Agency

EN European Standard

IATA International Air Transport Association
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization

LC50 Lethal concentration at which 50% of the population is killed

LD50 Lethal dose at which 50% of the population is killed

LTEL Long term exposure limit

NOAEC No observed adverse effect concentration
NOEC No Observed Effect Concentration

OECD Organisation for Economic Cooperation and Development

PBT Persistent, Bioaccumulative and Toxic
PNEC Predicted No Effect Concentration

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

TWA Time Weighted Average STEL Short term exposure limit

vPvB very Persistent and very Bioaccumulative

UK United Kingdom

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UN United Nations

Hazard classification / Classification code:

Flam. Liq. 2; Flammable Liquid Category 2 Eye Irrit. 2; Eye Irritation Category 2

STOT SE 3; Specific target organ toxicity — single exposure Category 3

Hazard Statement(s)

H225: Highly flammable liquid and vapour. H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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Annex to the extended Safety Data Sheet (eSDS) - Not applicable

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