



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

Product Formal Name	V^{MARKER PEN}
Product Form	Marker Pen
Product Use	Ink for writing instrument, for professional use only
Manufacturer	VITROMED GmbH – Hans-Knöll-Str. 6 – 07745 Jena – Germany
For Emergency Assistance	Phone +49 3641 5 39 19 76 Mail support@vitromed.com

SECTION 2 – HAZARDS IDENTIFICATION

Regulation (EC) No 1272/2008	Non-Dangerous
Potential Acute Health Effects	Intentional exposure to ink vapors may cause respiratory irritation. May cause upset stomach by ingestion. Ink contact with skin may cause irritation, swelling or redness. It is not expected to cause an allergic skin reaction.
Potential Chronic Health Effects	Not available

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

For ink unless otherwise specified: 1-Methoxypropan-2-ol (40 - 90 %), Chromium(III) compound (13 %), Copper compound (1 - 6 %).

SECTION 4 – FIRST AID MEASURES

Inhalation	Remove to fresh air. If breathing becomes difficult, call a physician.
Eyes	Flush with plenteous amounts of water for at least 15 minutes. Insure adequate flushing by separating the eyelids with fingers.
Skin	Wash after each contact.
Ingestion	Wash out with water provided person in conscious. Call a physician.

Seek medical attention if any discomfort should occur.

SECTION 5 – FIREFIGHTING MEASURES

Extinguishing Media	Water spray, carbon dioxide, dry chemical powder or appropriate foam.
Special Firefighting Procedure	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Unusual Fire and Explosion Hazards	Emits toxic fumes under fire conditions.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions	Wear chemical safety goggles. Wear rubber gloves. Avoid contact with skin, eyes and clothing.
Environmental Precautions	Prevent entry to sewers and public waters.
Methods for Cleaning Up	Rinse spill area with water. Dispose with laboratory waste.

SECTION 7 – HANDLING AND STORAGE

Handling	Refer Section 8.
Storage	Store in a dry, cool, well-ventilated location, away from all possible sources of ignition.
Specific Use	See instructions for use delivered with the device. For professional use only. Only for writing.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Controls (Occupational)	Not required in normal use.
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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor	Liquid; Color: black, red, blue or green; Organic solvent odor
pH	Not available
Boiling Point	120°C (1-Methoxypropan-2-ol)

V-MARKER PEN

Safety Data Sheet

Flash Point	32.2°C (1-Methoxypropan-2-ol)
Flammability	Flammable
Explosive Properties	LEL 1.9 Vol%, UEL 13.1 Vol% (1-Methoxypropan-2-ol)
Oxidizing Properties	Not available
Vapor Pressure	1.2 kPa at 20°C (1-Methoxypropan-2-ol)
Relative density	0.95 - 1.02 at 20°C
Solubility	Not available
Solubility in Water	Insoluble
Viscosity	4 - 6 mPA * s at 20°C
Evaporation Rate	Not available

SECTION 10 – STABILITY AND REACTIVITY

Stability	Stable.
Conditions to Avoid	Rough handling or dropping. Fire or intense heat may cause violent rupture of packages. Take precautionary measures against static discharges.
Materials to Avoid	Strong acids and bases.
Hazardous Decomposition Products	Heating can release vapors which can be ignited. Burning produces carbon oxides, obnoxious and toxic fumes.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity	1-Methoxypropan-2-ol	LD ₅₀ 6.6 mg/kg (rat oral)
		LD ₅₀ 13 mg/kg (rabbit skin)
	Copper compound	LD ₅₀ 2 mg/kg (rat oral)
Irritation	1-Methoxypropan-2-ol	500 mg/hr, Slight (rabbit skin)
		500 mg/24 hr, Slight (rabbit eye)

Toxicokinetics, metabolism, distribution, sensitization, repeated dose toxicity and CMR no data available. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

SECTION 12 – ECOLOGICAL INFORMATION

No known Ecological Damage. No additional data is available for the mobility, bioaccumulative potential, persistence and degradability.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose in a safe manner in accordance to with local and national regulations and avoid release to the environment.

SECTION 14 – TRANSPORT INFORMATION

UN number	1993
Class	3
Proper shipping name	Flammable Liquid N.O.S. (all colors)
Packaging group	III
Marine pollutant	not marine pollutant
Other applicable information	None.

SECTION 15 – REGULATORY INFORMATION

This product does not contain any ingredients which have been determined to be health hazardous pursuant to U.S. OSHA regulations, and which comprise 1 % or more (0.1 % for carcinogens) of the mixture.

Information shown on the Label ISO 15223-1 & 93/42/EEC

SECTION 16 – OTHER INFORMATION

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must take independent determinations of the suitability and completeness of information from all other sources to assure proper use and disposal of these materials and the safety and health of employees and customers. VITROMED GmbH shall not be held liable for any damage resulting from handling or from contact with its products.