

VM 652

Version 2.0

Revision Date 03/28/2011

Ref. 130000024744

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : VM 652
MSDS Number : 130000024744
Product Use : Solvent, Electrical/electronic industries
Manufacturer : HD MicroSystems™
250 Cheesequake Road
Parlin, New Jersey 08859
Product Information : 800-346-5656
Transport Emergency : CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Warning symptoms:

Mild eye irritation Prolonged skin contact with large doses, may cause dizziness and drowsiness.

Potential Health Effects

Skin : May cause skin irritation.
Eyes : Mild eye irritation
Inhalation : May cause irritation of respiratory tract. Necrosis
Repeated exposure : Adverse effects from repeated exposure may include:, Central nervous system effects, Respiratory tract irritation
Target Organs : Respiratory Tract, Central nervous system

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

VM 652

Version 2.0

Revision Date 03/28/2011

Ref. 130000024744

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
1-Methoxypropan-2-ol	107-98-2	99 - 100 %
2-Methoxypropanol	1589-47-5	<0.5 %

SECTION 4. FIRST AID MEASURES

- Skin contact : Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water.
- Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
- Inhalation : Move to fresh air.
- Ingestion : Immediately give plenty of water (if possible charcoal slurry). Do not induce vomiting without medical advice.
- General advice : Never give anything by mouth to an unconscious person.
- Notes to physician : If potential for exposure exists, see SECTION 8 of the SDS. No specific intervention is indicated. Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

- Flammable Properties
- Flash point : 33 °C (91 °F) closed cup
- Ignition temperature : 286 °C (547 °F)
- Lower explosion limit : 1.70 vol%

VM 652

Version 2.0

Revision Date 03/28/2011

Ref. 130000024744

- Upper explosion limit : 11.50 vol%
- Suitable extinguishing media : Water spray, Dry chemical, Carbon dioxide (CO₂), Foam
- Unsuitable extinguishing media : High volume water jet, (contamination risk)
- Firefighting Instructions : In the event of fire, wear self-contained breathing apparatus. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

- Safeguards (Personnel) : Wear personal protective equipment. Avoid contact with skin, eyes and clothing.
- Spill Cleanup : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Shovel into suitable container for disposal.
- Accidental Release Measures : Do not contaminate water.

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Provide adequate ventilation. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke.
- Handling (Physical Aspects) : Keep away from open flames, hot surfaces and sources of ignition.
- Storage : Keep containers tightly closed in a cool, well-ventilated place. Keep away from: Strong oxidizing agents

VM 652

Version 2.0

Revision Date 03/28/2011

Ref. 130000024744

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Mask with gas filter, type A (EN 141)

Hand protection : Material: butyl-rubber
 Glove thickness: 0.5 mm
 Wearing time: 480 min

Eye protection : Safety glasses with side-shields

Skin and body protection : Solvent-resistant apron

Protective measures : All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated.

Exposure Guidelines

Exposure Limit Values

1-Methoxypropan-2-ol

PEL: (OSHA) 100 ppm 360 mg/m³ 8 hr. TWA

PEL: (OSHA) 150 ppm 540 mg/m³ STEL

TLV (ACGIH) 100 ppm TWA

TLV (ACGIH) 150 ppm STEL

Ethanol

PEL: (OSHA) 1,000 ppm 1,900 mg/m³ 8 hr. TWA

TLV (ACGIH) 1,000 ppm 8 hr. TWA

TLV (ACGIH) 1,000 ppm STEL

AEL * (DUPONT) 1,000 ppm 8 & 12 hr. TWA

VM 652

Version 2.0

Revision Date 03/28/2011

Ref. 130000024744

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: liquid
Color	: clear
Odor	: sweet, ether-like
Freezing point	: -97 °C (-143 °F)
Boiling point/boiling range	: 118 - 119 °C (244 - 246 °F)
Vapour Pressure	: 14.53 hPa at 25 °C (77 °F)
Specific Gravity	: 0.9220
Water solubility	: completely miscible
Vapour density	: 3.11

SECTION 10. STABILITY AND REACTIVITY

Stability	: Stable at normal temperatures and storage conditions.
Conditions to avoid	: Strong sunlight for prolonged periods.
Incompatibility	: Incompatible with oxidizing agents.
Hazardous decomposition products	: Hazardous decomposition products: Carbon monoxide, Carbon dioxide (CO ₂), nitrogen oxides (NO _x)
Hazardous reactions	: Polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

VM 652	
Further information	: Solvents may degrease the skin.No data is available on the product itself.
1-Methoxypropan-2-ol	
Dermal LD50	: 13,000 mg/kg , rabbit
Oral LD50	: 5,200 mg/kg , rat

VM 652

Version 2.0

Revision Date 03/28/2011

Ref. 130000024744

Inhalation 4 h LC50	:	55.3 mg/l , rat
Inhalation	:	animals (unspecified species) Target Organs: Central nervous system, Respiratory Tract narcosis Respiratory tract irritation
Skin irritation	:	rabbit Mild skin irritation
Eye irritation	:	rabbit Eye irritation
Skin sensitization	:	guinea pig Animal test did not cause sensitization by skin contact. There are no reports of human skin sensitization.
Repeated dose toxicity	:	Inhalation animals (unspecified species) Target Organs: Central nervous system, Respiratory Tract Central nervous system depression, Respiratory tract irritation
Carcinogenicity	:	Overall weight of evidence indicates that the substance is not carcinogenic.
Mutagenicity	:	Evidence suggests this substance does not cause genetic damage in animals.
Reproductive toxicity	:	Evidence suggests the substance is not a reproductive toxin in animals.
Teratogenicity	:	Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.
2-Methoxypropanol Dermal LD50	:	13,000 mg/kg , rabbit Information given is based on data obtained from similar substances.
Oral LD50	:	5,200 mg/kg , rat Information given is based on data obtained from similar substances.

VM 652

Version 2.0

Revision Date 03/28/2011

Ref. 130000024744

- Inhalation 4 h LC50 : 55.3 mg/l , rat
Information given is based on data obtained from similar substances.
- Inhalation : animals (unspecified species)
Target Organs: Central nervous system, Respiratory Tract
narcosis
Respiratory tract irritation
Information given is based on data obtained from similar substances.
- Skin irritation : rabbit
Mild skin irritation Information given is based on data obtained from similar substances.
- Eye irritation : Moderate eye irritation, rabbit
Information given is based on data obtained from similar substances.
- Skin sensitization : guinea pig
Not a skin sensitizer. The toxicological data has been taken from products of similar composition.

There are no reports of human skin sensitization. The toxicological data has been taken from products of similar composition.
- Repeated dose toxicity : Inhalation
animals (unspecified species)
Central nervous system depression, Respiratory tract irritation,
Information given is based on data obtained from similar substances.
- Carcinogenicity : Overall weight of evidence indicates that the substance is not carcinogenic.
Information given is based on data obtained from similar substances.
- Mutagenicity : Evidence suggests this substance does not cause genetic damage in animals.
Information given is based on data obtained from similar product.
- Teratogenicity : Animal testing showed effects on embryo-foetal development at levels below those causing maternal toxicity.
Information given is based on data obtained from similar substances.

VM 652

Version 2.0

Revision Date 03/28/2011

Ref. 130000024744

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity
1-Methoxypropan-2-ol
96 h LC50 : Pimephales promelas (fathead minnow) 28,000 mg/l

2-Methoxypropanol
96 h LC50 : Fish (unspecified species) 20,800 mg/l
Information given is based on data obtained from similar substances.

Additional ecological information : No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

Environmental Hazards : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

DOT UN number : 1993

Proper shipping name : Flammable liquids, n.o.s. (1-Methoxy-2-propanol)
Class : 3
Packing group : III
Labelling No. : 3
Reportable Quantity : 100 lbs 1-Methoxypropan-2-ol

IATA_C UN number : 1993

Proper shipping name : Flammable liquid, n.o.s. (1-Methoxy-2-propanol)
Class : 3
Packing group : III

8 / 10

VM 652

Version 2.0

Revision Date 03/28/2011

Ref. 130000024744

Labelling No. : 3
Consult applicable regulation handbook for additional requirements.

IMDG UN number : 1993
Proper shipping name : Flammable liquid, n.o.s. (1-Methoxy-2-propanol)
Class : 3
Packing group : III
Labelling No. : 3

SECTION 15. REGULATORY INFORMATION

TSCA Status : On the inventory, or in compliance with the inventory

SARA 313 Regulated Chemical(s) : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

CERCLA Reportable Quantity : 101 lbs
Based on the percentage composition of this chemical in the product.:
1-Methoxypropan-2-ol

California Prop. 65 : WARNING! This product contains a chemical known to the State of California to cause cancer.Ethanol
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.Ethanol

PA Right to Know Regulated Chemical(s) : Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): 1-Methoxypropan-2-ol

NJ Right to Know Regulated Chemical(s) : Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): 1-Methoxypropan-2-ol

SECTION 16. OTHER INFORMATION

VM 652

Version 2.0

Revision Date 03/28/2011

Ref. 130000024744

Contact person : HD Microsystems™, Customer Service, 800-346-5656

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