

1-Methoxy-2-Propanol (328)

Version 1

Revision Date 02/20/2009

Print Date 02/20/2009

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 1-Methoxy-2-Propanol (328)
MSDS Number : 000000011219
Product Use Description : Solvent

Company : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : Medical: 1-800-498-5701
: **Transportation: 1-800-424-9300 or +1-703-527-3887**
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : liquid, clear

Color : colourless

Odor : ether-like

Hazard Summary : Flammable. In use, may form flammable/explosive vapour-air mixture. May be harmful if inhaled. Irritating to eyes, respiratory system and skin. May cause irritation of the gastrointestinal tract. Can be absorbed through skin. Repeated exposure may cause skin dryness or cracking.

Potential Health Effects

Skin : Irritating to skin.
Can be absorbed through skin.
May cause systemic poisoning with symptoms paralleling those of inhalation.
Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering.

Eyes : Irritating to eyes.
Causes itching, burning, redness and tearing.
May cause corneal injury.

Ingestion : Ingestion may cause gastrointestinal irritation, nausea,

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- vomiting and diarrhoea.
May cause systemic poisoning with symptoms paralleling those of inhalation.
- Inhalation : Causes respiratory tract irritation.
Causes headache, drowsiness or other effects to the central nervous system.
Exposure may result in reddening, tears and itching of the eyes and soreness in the nose and throat, together with coughing.
- Chronic Exposure : Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering.
- Aggravated Medical Condition : Respiratory disorders
Neurological disorders
Skin disorders
Eye disorders
- Target Organs : Eyes
Skin
Respiratory system
Central nervous system

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS-No. | Weight % |
|----------------------|-----------|----------------|
| 1-Methoxypropan-2-ol | 107-98-2 | 97.00 - 100.00 |
| 2-Methoxypropanol | 1589-47-5 | 0.00 - 3.00 |

SECTION 4. FIRST AID MEASURES

- Inhalation : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician.
- Skin contact : Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician.

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Ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician.

Notes to physician

Treatment : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Flash point : 32 °C (90 °F)
closed cup

Lower explosion limit : 1.6 %(V)

Upper explosion limit : 13.8 %(V)

Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
Cool closed containers exposed to fire with water spray.

Extinguishing media which shall not be used for safety reasons : Do not use a solid water stream as it may scatter and spread fire.

Specific hazards during fire fighting : Flammable.
Vapours may form explosive mixtures with air.
Vapours are heavier than air and may spread along floors.
Vapors may travel to areas away from work site before igniting/flashing back to vapor source.
In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide
Carbon dioxide (CO₂)

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus and protective suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear personal protective equipment.
Immediately evacuate personnel to safe areas.
Keep people away from and upwind of spill/leak.
Ensure adequate ventilation.
Remove all sources of ignition.
Do not swallow.
Avoid breathing vapors, mist or gas.

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- Avoid contact with skin, eyes and clothing.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
Discharge into the environment must be avoided.
Do not flush into surface water or sanitary sewer system.
Prevent product from entering drains.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Methods for cleaning up : Ventilate the area.
No sparking tools should be used.
Use explosion-proof equipment.
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

SECTION 7. HANDLING AND STORAGE**Handling**

- Handling : Wear personal protective equipment.
Use only in well-ventilated areas.
Keep container tightly closed.
Do not smoke.
Do not swallow.
Avoid breathing vapors, mist or gas.
Avoid contact with skin, eyes and clothing.
- Advice on protection against fire and explosion : Keep away from fire, sparks and heated surfaces.
Take precautionary measures against static discharges.
Ensure all equipment is electrically grounded before beginning transfer operations.
Use explosion-proof equipment.
Keep product and empty container away from heat and sources of ignition.
No sparking tools should be used.
No smoking.

Storage

- Requirements for storage areas and containers : Store in area designed for storage of flammable liquids. Protect from physical damage.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep away from heat and sources of ignition.
Keep away from direct sunlight.

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Store away from incompatible substances.
 Container hazardous when empty.
 Do not pressurize, cut, weld, braze, solder, drill, grind or expose
 containers to heat or sources of ignition.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
- Engineering measures : Use with local exhaust ventilation.
Prevent vapor buildup by providing adequate ventilation during and after use.
- Eye protection : Do not wear contact lenses.
Wear as appropriate:
Safety glasses with side-shields
Safety goggles
If splashes are likely to occur, wear:
Goggles or face shield, giving complete protection to eyes
- Hand protection : Solvent-resistant gloves
Gloves must be inspected prior to use.
Replace when worn.
- Skin and body protection : Wear as appropriate:
Solvent-resistant apron
Flame retardant antistatic protective clothing
If splashes are likely to occur, wear:
Protective suit
- Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.
For rescue and maintenance work in storage tanks use self-contained breathing apparatus.
Use NIOSH approved respiratory protection.
- Hygiene measures : When using, do not eat, drink or smoke.
Wash hands before breaks and immediately after handling the product.
Keep working clothes separately.
Remove and wash contaminated clothing before re-use.
Do not swallow.
Avoid breathing vapors, mist or gas.
Avoid contact with skin, eyes and clothing.

Exposure Guidelines

1-Methoxypropan-2-ol 107-98-2 ACGIH TWA 100 ppm

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| | | | |
|-----------|---------|---------|-----------|
| ACGIH | STEL | | 150 ppm |
| NIOSH | REL | 100 ppm | 360 mg/m3 |
| NIOSH | STEL | 150 ppm | 540 mg/m3 |
| OSHA Z1A | TWA | 100 ppm | 360 mg/m3 |
| OSHA Z1A | STEL | 150 ppm | 540 mg/m3 |
| US CA OEL | TWA PEL | 100 ppm | 360 mg/m3 |
| US CA OEL | STEL | 150 ppm | 540 mg/m3 |

Skin designation:
Can be absorbed through the skin.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------------|--------------------------------|
| Form | : liquid, clear |
| Color | : colourless |
| Odor | : ether-like |
| Molecular Weight | : 90.14 g/mol |
| pH | : not applicable |
| Melting point/range | : -97 °C (-143 °F) |
| Boiling point/boiling range | : 120 °C (248 °F) |
| Vapor pressure | : 14.7 hPa at 25 °C (77 °F) |
| Relative vapour density | : 3.1 (Air = 1.0) |
| Density | : 0.915 g/cm3 |
| Water solubility | : completely soluble |

SECTION 10. STABILITY AND REACTIVITY

| | |
|---------------------|----------------------------|
| Conditions to avoid | : Heat, flames and sparks. |
|---------------------|----------------------------|

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|----------------------------------|---|
| | Keep away from direct sunlight. Protect against light. Protect from exposure to air/oxygen (peroxide formation). |
| Materials to avoid | : Strong oxidizing agents Strong acids |
| Hazardous decomposition products | : In case of fire hazardous decomposition products may be produced such as: Carbon monoxide Carbon dioxide (CO ₂) |
| Hazardous reactions | : Hazardous polymerisation does not occur. Stable under recommended storage conditions. |

SECTION 11. TOXICOLOGICAL INFORMATION

| | |
|-----------------------|---------------------------------------|
| Acute oral toxicity | : LD50 rat Dose: 5,660 mg/kg |
| Acute dermal toxicity | : LD50 rabbit Dose: > 13,000 mg/kg |

SECTION 12. ECOLOGICAL INFORMATION

| | |
|--|--|
| Toxicity to fish | : LC50 Species: Pimephales promelas (fathead minnow) Dose: 20.8 mg/l Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates. | : static test LC50 Species: Daphnia magna (Water flea) Dose: 23.3 g/l Exposure time: 48 h |
| Toxicity to algae | : Growth inhibition EC50 Species: Pseudokirchneriella subcapitata (green algae) Dose: > 1,000 mg/l Exposure time: 7 d |

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Information: Observe all Federal, State, and Local Environmental regulations.

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SECTION 14. TRANSPORT INFORMATION

| | | |
|------------------|--|------------------------|
| DOT | UN-Number | : 3092 |
| | Proper shipping name | : 1-Methoxy-2-propanol |
| | Class | : 3 |
| | Packing group | : III |
| | Hazard Label | : 3 |
| IATA | UN Number | : 3092 |
| | Description of the goods | : 1-Methoxy-2-propanol |
| | Class | : 3 |
| | Packaging group | : III |
| | Hazard Label | : 3 |
| | Packing instruction (cargo aircraft) | : 310 |
| | Packing instruction (passenger aircraft) | : 309 |
| IMDG | Substance No. | : UN 3092 |
| | Description of the goods | : 1-Methoxy-2-propanol |
| | Class | : 3 |
| | Packaging group | : III |
| | Hazard Label | : 3 |
| | EmS Number | : F-E |
| Marine pollutant | : no | |

SECTION 15. REGULATORY INFORMATION
Inventories

| | |
|---|--|
| EU. EINECS | : On the inventory, or in compliance with the inventory |
| US. Toxic Substances Control Act | : On TSCA Inventory |
| Australia. Industrial Chemical (Notification and Assessment) Act | : On the inventory, or in compliance with the inventory |
| Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133) | : All components of this product are on the Canadian DSL list. |

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Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Toxic Chemical Control Law (TCCL) List : On the inventory, or in compliance with the inventory

Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances : On the inventory, or in compliance with the inventory

Switzerland. Consolidated Inventory : On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : On the inventory, or in compliance with the inventory

National regulatory information

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

Massachusetts RTK : 1-Methoxypropan-2-ol 107-98-2

New Jersey RTK : 1-Methoxypropan-2-ol 107-98-2

Pennsylvania RTK : 1-Methoxypropan-2-ol 107-98-2

WHMIS Classification : B2
D2B

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SECTION 16. OTHER INFORMATION

| | HMIS III | NFPA |
|-----------------|-----------------|-------------|
| Health Hazard | : 1 | 1 |
| Flammability | : 3 | 3 |
| Physical Hazard | : 0 | |
| Instability | : | 0 |