

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

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| Material name | CE-1270 |
| Manufacturer | The Procter & Gamble Company Procter & Gamble Chemicals Sharon Woods Innovation Center 11530 Reed Hartman Highway Cincinnati, Ohio 45241 1-800-477-8899 or 1-513-626-6882 PGChemMSDS.IM@pg.com CHEMTREC: 1-800-424-9300 U.S. and Canada CHEMTREC: 1-703-527-3887 For calls originating elsewhere |
| Version # | 02 |
| Revision date | 04-27-2010 |
| CAS # | 67762-40-7 |
| MSDS Number | ME511 |
| Product Code | 99281514 |
| Product use | Production of amides, methyl ester sulfonates, rolling oils, low-volume solvents, and metal working fluids. |
| Synonym(s) | METHYL LAURATE * METHYL MYRISTATE |

2. Hazards Identification

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| Emergency overview | If product is heated, vaporization can occur. Eye, skin, and upper respiratory irritation can occur. |
| Potential health effects | |
| Eyes | Accidental exposure will cause a mild but transient irritation. |
| Skin | Mild to no irritation expected. |
| Inhalation | No harmful effects expected with normal use. |
| Ingestion | May cause irritation of the gastrointestinal tract. |
| Signs and symptoms | Accidental exposure to the eyes may produce a mild but transient irritation. Skin: Mild to no irritation expected. |
| Potential environmental effects | Not known. |

3. Composition / Information on Ingredients

| Components | CAS # | Percent |
|-------------------------------------|--------------|----------------|
| Fatty acids, C10-C16, methyl esters | 67762-40-7 | 100 |

4. First Aid Measures

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| First aid procedures | |
| Eye contact | Flush thoroughly with water for at least 15 minutes. Get medical assistance. |
| Skin contact | Wash the skin immediately with soap and water. Remove contaminated clothing. Get medical attention if irritation develops and persists. Wash clothing separately before reuse. |
| Inhalation | Move to fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. |
| Ingestion | If swallowed, do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to a victim who is unconscious or is having convulsions. |

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media SMALL FIRES: Use CO2 or dry chemical.
LARGE FIRES: Use foam.

Cool containers with flooding quantities of water until well after fire is out.

Unsuitable extinguishing media Water may be ineffective.

Protection of firefighters

Specific hazards arising from the chemical Does not decompose up to 350 F (177 C).
Carbon monoxide with incomplete combustion.

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

6. Accidental Release Measures

Personal precautions Wear suitable protective clothing. Wear appropriate personal protective equipment.
An appropriate NIOSH/MSHA approved respirator should be used if a mist or vapor is generated.

Environmental precautions Dike flow of spilled material using soil or sandbags to minimize contamination of drains, surface and ground waters.

Methods for cleaning up Ventilate the area. Eliminate sources of ignition.
Contain spill. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Use clean non-sparking tools to collect absorbed material.

7. Handling and Storage

Handling Handle in accordance with good industrial hygiene and safety practice.
Avoid contact with skin and eyes. Avoid contact with clothing. Wash thoroughly after handling.
Ground and bond containers when transferring material.
Use spark-proof tools and explosion-proof equipment.
Empty containers contain product residue and can be dangerous, follow all hazard warnings and precautions even after container is emptied.
Keep away from sources of ignition.

Storage Can be stored in most common storage vessels including carbon steel, aluminum, fiberglass and stainless steel.
Keep away from heat, sparks, and flame.
Keep away from possible contact with incompatible substances.
Store in a cool dry place in accordance with 29 CFR 1910-106/NFPA 30.

Specific uses Follow bulk handling and storage procedures as noted above.

8. Exposure Controls / Personal Protection

Engineering controls Local exhaust is recommended.
Mechanical - may be necessary if working at elevated temperatures or in enclosed areas.

Personal protective equipment

General Observe good industrial hygiene practices.
Avoid contact with eyes. Avoid contact with skin. Avoid breathing (heated) vapors.

Boots. Apron. Eye wash fountain and emergency showers are recommended. Wear suitable protective clothing.

Eye / face protection Goggles or face shield with goggles, dependent upon potential exposure.

Skin protection Nitrile gloves are recommended.
Dependent upon degree of potential exposure, additional personal protective equipment may be required, such as chemical boots and full protective clothing.

Respiratory protection None required for ambient temperature, although an appropriate NIOSH/MSHA approved air-purifying respirator should be used if a mist or vapor is generated. A NIOSH/MSHA approved self-contained breathing apparatus or air-supplied respirator is recommended if the concentration exceeds the capacity of cartridge respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Environmental exposure controls Contact Procter and Gamble for specific Community information.

9. Physical & Chemical Properties

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| Appearance | Liquid. |
| Color | Water white to Yellow. |
| Odor | Musty. |
| Odor threshold | Not available. |
| Physical state | Liquid. |
| Form | Liquid. |
| pH | Not available. |
| Melting point | 50 °F (10 °C) |
| Freezing point | Not available. |
| Boiling point | > 400 °F (> 204.4 °C) @ 760 mm Hg (101.3kPa) |
| Flash point | > 262 °F (> 127.8 °C) Pensky-Martens Closed Cup |
| Evaporation rate | Not available. |
| Flammability limits in air, upper, % by volume | Not available. |
| Flammability limits in air, lower, % by volume | Not available. |
| Vapor pressure | < 1 mm Hg @ 72 F (22 C) |
| Vapor density | Not available. |
| Specific gravity | Not available. |
| Relative density | 0.88 @ 25/25 C |
| Solubility (water) | Negligible @ 72 F (22 C) |
| Partition coefficient (n-octanol/water) | Not available |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| VOC | Not available. |

10. Chemical Stability & Reactivity Information

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| Chemical stability | Stable at normal conditions. |
| Conditions to avoid | Reacts with strong base to produce methanol. |
| Materials to avoid | Oxidizing agents. Strong bases. |
| Hazardous decomposition products | Does not decompose up to 350 F (177 C). Carbon monoxide with incomplete combustion. |
| Hazardous polymerization | Hazardous polymerization does not occur. |

11. Toxicological Information

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| Further information | Acute Oral Toxicity: The acute oral LD50 on rats would be expected to be greater than 23 g/kg of body weight. Eye Irritation: Mild transient eye irritation would be expected with undiluted product in rabbits. Skin Irritation: 24 hour human patch test indicated that undiluted product produced mild irritation. The irritancy was less than the result produced by a 4% aqueous soap solution. |
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12. Ecological Information

Ecotoxicological data

Constituents

DODECANOIC ACID, METHYL ESTER (111-82-0)

TETRADECANOIC ACID, METHYL ESTER (124-10-7)

Test Results

LC50 Bluegill (*Lepomis macrochirus*): > 1000 mg/l 96.00 hours
Microbiological Inhibition: None at 10,000 mg/l.

LC50 Bluegill (*Lepomis macrochirus*): > 1000 mg/l 96.00 hours
Microbiological Inhibition: None at 10,000 mg/l.

Aquatic toxicity The 96 hour LC50 for Bluegills was greater than 1000 mg/l.

13. Disposal Considerations

Disposal instructions Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
Do not dispose of via sinks, drains or into the immediate environment.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Inventory status

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|-------------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Contains no California Prop 65 chemicals.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Contains no Pennsylvania Right To Know hazardous substances

16. Other Information

HMIS® ratings Health: 0
Flammability: 1
Physical hazard: 0

NFPA ratings Health: 0
Flammability: 1
Instability: 0

Disclaimer

The submission of the MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied are for use only in connection with occupational safety and health.

The information contained herein has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific product designated herein, and does not relate to use in combination with any other material of any other process. Procter & Gamble assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the controlled product.

Issue date

04-27-2010

This data sheet contains changes from the previous version in section(s):

Product and Company Identification: Product and Company Identification