

SAFETY DATA SHEET

1. Identification

GHS product identifier	CE-1295
SDS number	ME513
Product Code	99281586 (10226262)
Version #	07
Issue date	04-17-2010
Revision date	05-28-2015
Supersedes date	05-21-2015
Product use	Production of amides, methyl ester sulfonates, rolling oils, low-volume solvents, and metal working fluids. Intermediate. Fuel and fuel additives.
Recommended Restrictions	Not available.
Synonym(s)	METHYL DODECANOATE * METHYL LAURATE
Manufacturer	The Procter & Gamble Company Procter & Gamble Chemicals Sharon Woods Innovation Center 11530 Reed Hartman Highway Cincinnati, OH 45241 United States For Quality Service or Product Related Questions Call: 1-800-477-8899 PGChemMSDS.IM@pg.com For Emergency Contact CHEMTREC: 1-800-424-9300 U.S. and Canada For Calls Originating Elsewhere CHEMTREC: 1-703-527-3887

2. Hazards identification

GHS classification	
Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.

GHS label elements

Signal words	None.
Symbols	None.
Hazard statement	None.

Precautionary statement

Prevention	None.
Response	None.
Storage	None.
Disposal	None.

3. Composition/information on ingredients

Components	CAS #	Percent
DODECANOIC ACID, METHYL ESTER	111-82-0	95 - 100

4. First aid measures

First aid procedures

Eye	Flush thoroughly with water for at least 15 minutes. Get medical assistance.
Skin	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	Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. Get medical attention.

Notes to physician Not available.

5. Fire-fighting measures

Flammable properties Not flammable by OSHA criteria.

Extinguishing media

Suitable extinguishing media Foam. Carbon dioxide (CO₂). Dry chemicals.

Unsuitable extinguishing media Do not use water jet.

Protection of firefighters

Specific hazards arising from the chemical Combustion causes toxic fumes. Carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters Wear self-contained breathing apparatus and protective clothing.

Fire fighting equipment/instructions Cool containers with flooding quantities of water until well after fire is out.

6. Accidental release measures

Personal precautions Wear suitable protective clothing, gloves and eye/face protection. 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. Avoid discharge into drains, water courses or onto the ground.

Methods for containment 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. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Contain spill. For waste disposal, see section 13 of the MSDS.

7. Handling and storage

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

Storage Can be stored in most common storage vessels including carbon steel, aluminum, fiberglass and stainless steel. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures.

8. Exposure controls / personal protection

Control parameters

ACGIH
No relevant exposure guidelines for ingredients.

U.S. - OSHA
No relevant exposure guidelines for ingredients.

Engineering controls	Local exhaust is recommended. Mechanical ventilation may be required.
Personal protective equipment	
General	Observe good industrial hygiene practices. Avoid breathing (heated) vapors. Avoid contact with eyes. Avoid contact with skin.
Eye/face protection	Use safety goggles and face shield in case of splash risk.
Skin protection	Wear suitable protective clothing. Nitrile gloves are recommended. If prolonged or repeated contact is likely, chemical resistant clothing is recommended.
Respiratory protection	No protection is ordinarily required under normal conditions of use and with adequate ventilation. When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided.
General hygiene considerations	Wash hands after handling. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Color	Water white to Yellow
Form	Liquid.
Odor	Musty.
Odor threshold	Not available.
pH	Not available.
Melting point/Freezing point	41.4 °F (5.2 °C)
Boiling point	>= 400 °F (>= 204.44 °C) at 760 mm Hg (101.3kPa)
Flash point	>= 240.00 °F (>= 115.56 °C) Pensky-Martens Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Flammability limits in air, lower, % by volume	Not available.
Flammability limits in air, upper, % by volume	Not available.
Vapor pressure	< 1 mm Hg at 72 °F (22 °C)
Vapor density	Not available.
Relative density	0.87 at 25/25 °C
Solubility (H2O)	Negligible @ 72 F (22 °C)
Partition coefficient (n-octanol/water)	See Section 12.
Auto-ignition temperature	428 °F (220 °C)
Decomposition temperature	When heated to decomp, emits acrid smoke and irritating vapors.
Viscosity	4 cP
Specific gravity	0.87

10. Stability and reactivity

Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Reacts with strong base to produce methanol.
Incompatible materials	Oxidizing agents. Strong bases.
Hazardous decomposition products	Carbon monoxide and carbon dioxide.

11. Toxicological information

Toxicological data

Components	Species	Test Results
DODECANOIC ACID, METHYL ESTER (111-82-0)		
Acute		
<i>Inhalation</i>		
LC50	Rat	> 5 mg/l, 4 hours, No mortality. OECD 436.
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg, bw/day. No effect. OECD 401.
General information	Not available.	
Information on likely routes of exposure		
Ingestion	Not classified.	
Inhalation	Not classified.	
Skin contact	Not classified.	
Eye contact	Not classified.	
Acute effects	Not classified.	
Sensitization	Not classified.	
Sensitization		
DODECANOIC ACID, METHYL ESTER		In vivo, OECD 406. Result: Not sensitizing Species: Guinea pig
Carcinogenicity	Lack of data. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
Mutagenicity	Not classified.	
Germ cell mutagenicity: Ames test		
DODECANOIC ACID, METHYL ESTER		In vitro, OECD 471. Result: Negative Species: Salmonella Typhimurium (Salmonella enterica) Organ: his operon Test Duration: 48 hours
Reproductive effects	Not classified.	
Fertility effects - Males and females		
DODECANOIC ACID, METHYL ESTER		1000 mg/kg bw/day NOAEL, OECD 422. Species: Rat Organ: No effect
Teratogenicity	Not classified.	
Developmental effects		
DODECANOIC ACID, METHYL ESTER		1000 mg/kg bw/day NOAEL, OECD 422. Result: No effect Species: Rat
Skin corrosion/irritation	Not classified.	

Irritation Corrosion - Skin

DODECANOIC ACID, METHYL ESTER

0.5 ml In vivo, OECD 404.

Result: No effect

Species: Rabbit

Test Duration: 4 hours

Serious eye damage/eye irritation Not classified.

Irritation Corrosion - Eye

DODECANOIC ACID, METHYL ESTER

0.1 ml In vivo, OECD 405.

Result: Not irritating

Species: Rabbit

Test Duration: 24 hours

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

DODECANOIC ACID, METHYL ESTER

1000 mg/kg bw/day NOAEL, OECD 422.

Result: No effect

Species: Rat

Other information Not available.

12. Ecological information

Ecotoxicological data

Components		Species	Test Results
DODECANOIC ACID, METHYL ESTER (111-82-0)			
Other	NOEC	Activated sludge of a predominantly domestic sewage	>= 1000 mg/l, 3 hours, OECD 209.
Aquatic			
<i>Acute</i>			
Algae	EC50	Green algae (<i>Pseudokirchneriella subcapitata</i>)	0.324 mg/l, 72 hours, OECD 201.
Crustacea	EC50	Water flea (<i>Daphnia magna</i>)	0.255 mg/l, 48 hours, OECD 202.
Fish	LC50	Medaka, high-eyes (<i>Oryzias latipes</i>)	> 1 mg/l, 96 hours, OECD 203.
<i>Chronic</i>			
Crustacea	NOEC	Water flea (<i>Daphnia magna</i>)	0.0814 mg/l, 21 days, OECD 211.
Terrestrial			
<i>Chronic</i>			
Other	NOEC	Earthworm (<i>Eisenia fetida</i>)	> 1000 mg/kg, 28 days, soil/dw. OECD 222.

Ecotoxicity Not available.

Persistence and degradability Readily biodegradable.

Photolysis

Half-life (Photolysis-atmospheric)

DODECANOIC ACID, METHYL ESTER

DT50 29.2 hours, AOPWIN v1.92.

Hydrolysis

Half-life (Hydrolysis)

DODECANOIC ACID, METHYL ESTER

0, Half-life 7.283 yr, 25 °C, pH 7. QSAR.

Biodegradability**Percent degradation (Aerobic biodegradation)**

DODECANOIC ACID, METHYL ESTER

78 %, OECD 301C

Result: Readily biodegradable

Test Duration: 28 days

Bioaccumulative potential**Bioconcentration factor**

DODECANOIC ACID, METHYL ESTER

154.3, L/kg QSAR. BCFBAF v3.01.

Species: Fish

Octanol/water partition coefficient log Kow

DODECANOIC ACID, METHYL ESTER

5.43

Mobility in soil

Not available.

Adsorption**Soil/sediment sorption - log Koc**

DODECANOIC ACID, METHYL ESTER

3.85, 25 °C. QSAR. KOCWN v2.00.

Other adverse effects

Not available.

13. Disposal considerations**Disposal methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.

Waste from residues / unused products

Dispose of contents/container in accordance with local/regional/national/international regulations.

Contaminated packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport information**DOT**

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information**US federal regulations**

Not regulated.

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

Country(s) or region	Inventory name	On inventory (yes/no)*
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
Taiwan	Taiwan Inventory	No
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 This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - New Jersey RTK - Substances: Listed substance

Contains no New Jersey Right To Know Substances

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Contains no Pennsylvania Right To Know hazardous substances

16. Other information

Further information

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 0
Flammability: 1
Physical hazard: 0

NFPA ratings

Health: 0
Flammability: 1
Instability: 0

Disclaimer

The submission of the SDS 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.

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

Hazards identification: Response
Hazards identification: Prevention
Hazards identification: Disposal
Hazards identification: GHS Hazard Statements
Hazards identification: GHS Symbols
Hazards identification: GHS Signal Words
Physical & Chemical Properties: Multiple Properties
Transport Information: Material Transportation Information