Material Safety Data Sheet



PRODUCT NAME: METHYL PALMITATE-STEARATE PME 1618 DPK

CHEMICAL PRODUCT AND DISTRIBUTOR IDENTIFICATION

PRODUCT NAME: Methyl Palmitate-Stearate PME 1618 DPK (Refined Palm Kernel-based)

CAS #: 67762-38-3

DATE: November 10, 2010

DISTRIBUTOR: ACME-HARDESTY COMPANY

ADDRESS: 450 Sentry Parkway

Blue Bell, PA 19422

TELEPHONE: (866) 226 – 3834 FAX: (215) 591 – 3620

EMERGENCY: CHEMTREC (800) 424-9300

COMPOSITION / INFORMATION ON INGREDIENTS

SYNONYMS: Fatty acids, palm oil, methyl esters

CHEMICAL

Methyl Esters $C_{18} H_{34} O_{2} \& C_{18} H_{32} O_{2}$

HAZARDS IDENTIFICATION

Classified as non-hazardous to human and environment

FIRST AID MEASURES

INHALATION: ACUTE/HAZARD SYMPTOM: May cause irritation

FIRST AID: Remove source of contamination r move victim to fresh air.

If adverse effects occur, remove to uncontaminated area.

Give artificial respiration if not breathing.

Get immediate medical attention.

SKIN CONTACT: ACUTE/HAZARD SYMPTOM: May cause redness

FIRST AID: Wash off with plenty of water and soap.

If skin irritation occurs, seek medical advice/attention Take off contaminated clothing and wash before reuse

EYE CONTACT: ACUTE/HAZARD SYMPTOM: May cause irritation

FIRST AID: Rinse cautiously with water for several minutes

Remove contact lenses, if present and easy to do, and continue rinsing

If eye irritation persists, seek medical advice/attention

INGESTION: ACUTE/HAZARD SYMPTOM: May cause irritation

FIRST AID:

Rinse mouth and do NOT induce vomiting

If vomiting occurs, keep head lower than hips to help prevent aspiration

If person is unconscious, turn head to the side

Seek medical attention immediately

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FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Dry chemical, appropriate foam or carbon dioxide

SPECIFIC HAZARDS: Combustible when exposed to heat or flame

Thermal decomposition will evolve irritant vapors

PROTECTION FOR FIRE-FIGHTERS: Move container from fire area if it can be done without risk

Do not scatter spilled material with high-pressure water streams

Dike for later disposal

Use extinguishing agents appropriate for surrounding fire Avoid inhalation of material or combustion by-products

Stay upwind and keep out of low areas

ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid contact with eyes. Do not breathe vapor.

ENVIRONMENTAL PRECAUTIONS: Minimize contamination of drains, surface, and ground waters.

METHODS FOR CLEANING UP:

SMALL SPILLS: Absorb with inert material and put spilled material in appropriate container for disposal

LARGE SPILLS: Absorb with inert material and put spilled material in appropriate container for disposal

Ventilate area and wash spill site and allow to evacuate through the sanitary system

HANDLING AND STORAGE

HANDLING: Keep away from heat and sources of ignition

Empty containers pose a fire risk

Evaporate the residue under a fume hood Ground all equipment containing material

Do not ingest – If ingested, seek medical advice immediately

Avoid contact with skin and eyes

Do not breathe vapors

Wear suitable protective clothing in case of insufficient ventilation

Wear suitable respiratory equipment

STORAGE: Store in the original closed containers

Can be stored in most common storage vessels including carbon steel

Keep in cool, dry place

Storage Class: VCI-Storage Class: 10 (BRD)
Safe Storage/Transport Pressure: Ambient
Load/Unload Temperature: 32 – 36°C

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EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE: No occupational exposure limits have been established.

VENTILATION: Provide local exhaust ventilation system

Ensure compliance with applicable exposure limits

PERSONAL PROTECTIVE EQUIPMENT:

SKIN/BODY PROTECTION: Wear chemical resistant gloves

EYE PROTECTION: Wear splash resistant safety goggles and face shields

RESPIRATORY PROCTECTION: May be needed under conditions of frequent use of heavy exposure

Consider warning properties before use

Any Chemical cartridge respirator with organic vapor cartridge(s)

Any chemical cartridge respirator with full face piece & organic vapor cartridge Any air-purifying respirator with full face piece and an organic vapor canister

ENGINEERING MEASURES: Ensure ventilation or local exhaust if formation of vapor occurs.

HYGIENE MEASURES: Good industrial hygiene should be followed.

PHYSICAL AND CHEMICAL PROPERTIES

THE VALUES LISTED BELOW ARE NOT PRODUCT SPECIFICATIONS:

APPEARANCE: Yellowish liquid

ODOR: Musty

ODOR THRESHOLD: Not available pH: Not Applicable

MELTING POINT, °C: 8°C

BOILING POINT, °C: Approx. 204 @ 760 mm Hg

FLASH POINT, °C: Approx. 218°C (Pensky-Marten Closed Cup)

EVAPORATION RATE: Not applicable

FLAMMABILITY (Solid/Liquid): OSHA Flammability Class III-B

VAPOR PRESSURE @ 20°C: Not available VAPOR DENSITY (Air=1): Not available

RELATIVE DENSITY @ 25°C, g/cm³: 0.86

SOLUBILITY IN WATER @ 20°C: Insoluble

PARTITION COEFFICIENT: n-octanol/water: Not available

AUTO-IGNITION TEMPERATURE: Not available

DECOMPOSITION TEMPERATURE, °C: Not available

VISCOSITY @ 35°C: Approx. 7 mPa.s

EXPLOSION LIMITS: Doesn't contain explosive properties OXIDATION PROPERTIES: Doesn't contain oxidizing properties

STABILITY AND REACTIVITY

REACTIVITY: Not a self-reactive substance

CHEMICAL STABILITY: Stable under normal temperatures and pressure CONDITIONS TO AVOID: Heat, flames, sparks and other sources of ignition Incompatible materials/oxidizing agents and strong bases

HAZARDOUS REACTIONS: Will not polymerize

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition will evolve irritant vapors

Thermal decomposition products: Oxides of carbon and water

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TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: LD50 (oral, rat) = > 2,000 mg/kg body weight

LD 50 (dermal) = Not available LC 50 (inhalation) = Not available

SKIN CORROSION/IRRITATION: Not classified (rabbit) EYE DAMAGE/IRRITATION: Not classified (rabbit)

SENSITIZATION: No evidence of skin sensitization (guinea-pig)

STOST – SINGLE/REPEATED EXPOSURE: Not available ASPIRATION HAZARD: Not available

CMR EFFECTS:

CARCINOGENICITY: Not listed by ACGIH, IARC, NTP, DFG or OSHA

GERM CELL MUTAGENICITY: Negative in AMES test

REPRODUCTIVE TOXICITY: Not Listed: CA Prop 65 Developmental Toxin

U.S. TRI Developmental Toxin

CA Prop 65 Female Reproductive Toxin

California Proposition 65 Male Reproductive Toxin

U.S. TRI Reproductive Toxin

ECOLOGICAL INFORMATION

ACUTE TOXICITY: ACUTE: 96 hrs LC50 (fish) > 100 mg/L

CHRONIC: Not available

MOBILITY IN SOIL: Not available

BIODEGRADABILITY: Readily Biodegradable

BIO-ACCUMULATIVE POTENTIAL: Not available

OTHER ADVERSE EFFECTS: Not available

DISPOSAL CONSIDERATIONS

Disposal is to be performed in compliance with all Federal, State/Provincial and local regulations.

Do not dispose of via sinks, drains or into the immediate environment.

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TRANSPORT INFORMATION

UN MODEL REGUALTION:
LAND TRANSPORT ADR/RID/ADN:
AIR TRANSPORT ICAO-TI and IATA-DGR:
MARITIME TRANSPORT IMDG:
U.S. DOT INFORMATION:
Not classified
Not classified
Not classified

BULK TRANSPORT:

ANNEX II of MARPOL 73/78: Name: Palm Oil Fatty Acid Methyl Ester

Pollution Category: Y
Ship Type: 2

REGULATORY INFORMATION

GHS CLASSIFICATION: Not classified as hazardous material to human or environment

U.S. FEDERAL REGULATIONS: No product components are listed under: SARA Section 302 (40 CFR 355)

SARA Section311/312 (40 CFR 370.21) SARA Section 313 (40 CFR 372.65)

Number 834, Hazard Class 1 – Low hazard to waters

CERCLA (40 CFR 302.4)

GERMANY WATER CLASIFICATION/

NATIONAL CHEMICAL INVENTORY LISTING:

WGK (Wassergefährdungsklassen):

Compliant **EUROPE (EINECS):** Compliant USA (TSCA): Compliant CANADA (DSL): Compliant AUSTRALIA (AICS): Compliant JAPAN (ENCS): Compliant CHINA (IECSC): Compliant KOREA (ECL): NEW ZEALAND (NZIOC): Compliant

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Users must make their own determination that handling, storage and use of the product in the anticipated manner is safe and appropriate. Because these actions of the user are out of our control, and may be beyond our knowledge, we do not assume responsibility and expressly disclaim liability for loss, damage, expense or any other claim arising out of or in any way connected with the handling, storage, use or disposal of the product.

Disposal of containers must comply with applicable federal, state and local laws and regulations. Empty containers should never be given to individuals.