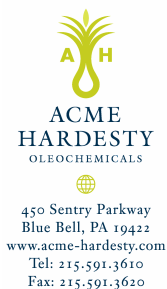


Material Safety Data Sheet



PRODUCT NAME: OLEIC ACID 105

CHEMICAL PRODUCT AND DISTRIBUTOR IDENTIFICATION

TRADE NAME: OLEIC ACID 105
CAS #: 112-80-1
DATE: February 10, 2011

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

| INGREDIENTS: | CAS# | % (w/w) | OSHA PEL | ACHIH TLV |
|--|----------|---------|--------------------|--------------------|
| Saturated and unsaturated straight chain aliphatic monocarboxylic acids, mainly oleic acid | 112-80-1 | 60-100 | No PEL established | No TLV established |

Ingredients not precisely identified are proprietary or non-hazardous.
Values are not product specifications.

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: COLOR: Pale yellow to yellow
FORM: Liquid @ 20°C
ODOR: Faint odor

INHALATION OR INGESTION MAY CAUSE MUCOUS MEMBRANE IRRITATION. MAY CAUSE EYE IRRITATION.

GENERAL: Limited toxicity data are available on this specific product; this health hazard assessment is based on the results of screening tests.

EYE CONTACT: May cause eye irritation in man.

SKIN CONTACT: No irritation is likely to develop following contact with human skin.
No sensitization reactions.
This product will probably not be absorbed through human skin.

INHALATION: Unlikely to be hazardous by inhalation because of material's low vapor pressure at ambient temperature.
Thermal decomposition will evolve irritant vapors.
No toxic effects are known to be associated with inhalation of this material.

INGESTION: Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.
No toxic effects are expected following ingestion of this product.

OTHER: Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.

FIRST AID MEASURES

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes.
If redness, itching, or a burning sensation develops, have eyes examined and treated by medical personnel.

SKIN CONTACT: Wash material off of the skin with plenty of soap and water.
If redness, itching, or a burning sensation develops, get medical attention.

INHALATION: Remove victim to fresh air.
If a cough or other respiratory symptoms develop, consult medical personnel.

INGESTION: DO NOT INDUCE VOMITING.
Give one or two glasses of water to drink
Refer to medical personnel or take direction from either a physician or a poison control center.
Never give anything by mouth to an unconscious person.

FIRE-FIGHTING MEASURES

FLASH POINT (°F): 356 (open cup)
FLASH POINT (°C): 180 (open cup)
AUTO-IGNITION TEMPERATURE (°F): 662
AUTO-IGNITION TEMPERATURE (°C): 350
FLAMMABLE LIMITS: No data.
EXTINGUISHING MEDIA: Water fog, alcohol foam, carbon dioxide, dry chemical.
SPECIAL FIRE-FIGHTING PROTECTIVE EQUIPMENT: A self contained breathing apparatus and suitable protective clothing must be worn in fire conditions.

FIRE AND EXPLOSION HAZARDS: None known.
COMBUSTION PRODUCTS: Thermal decomposition will evolve irritant vapors.

EXPLOSION DATA:
SENSITIVITY TO MECHANICAL IMPACT: No data.
SENSITIVITY TO STATIC DISCHARGE: No data.

ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Refer to Exposure Control/Personal Protection section.

ACCIDENTAL RELEASE/SPILLS: Contain spill.
Soak up material with absorbent and shovel into a chemical waste container.
Wash residue from spill area with water containing detergent and flush to a sewer serviced by a permitted wastewater treatment facility.

HANDLING AND STORAGE

HANDLING: Normal precautions should be observed as for handling all chemicals
Prevent eye contact.

SPECIFIC USES OF THE PRODUCT: Smoldering can occur upon leakage onto fibrous insulation material.

STORAGE: Store in original containers.

EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:

| <u>OSHA PEL</u> <u>COMPONENT NAME</u> | <u>EXPOSURE LIMITS</u> | <u>NOTES</u> |
|---|------------------------|--------------|
| No OSHA PEL assigned. Minimize exposure in accordance with good hygiene practice. | | |

| <u>ACGIH TLV</u> <u>COMPONENT NAME</u> | <u>EXPOSURE LIMITS</u> | <u>NOTES</u> |
|--|------------------------|--------------|
| No ACGIH TLV assigned. Minimize exposure in accordance with good hygiene practice. | | |

PERSONAL PROTECTION:

| | |
|-------------------------|--|
| ENGINEERING CONTROLS: | Provide adequate ventilation |
| EYE PROTECTION: | Chemical tight goggles |
| PROTECTIVE CLOTHING: | Impervious gloves |
| RESPIRATORY PROTECTION: | Respiratory protection is not normally needed if controls are adequate |
| OTHER: | Eyewash and safety shower easily accessible to the work area |

PHYSICAL DATA AND CHEMICAL PROPERTIES

| | |
|---------------------------------|----------------------------------|
| COLOR: | Pale yellow to yellow |
| FORM: | Liquid @ 20 °C |
| ODOR: | Faint odor |
| pH: | Not applicable. |
| BOILING POINT (°F): | 428 (10 hPa) |
| BOILING POINT (°C): | 220 (10 hPa) |
| FLASH POINT (°F): | 356 (open cup) |
| FLASH POINT (°C): | 180 (open cup) |
| AUTO-IGNITION TEMPERATURE (°F): | 662 |
| AUTO-IGNITION TEMPERATURE (°C): | 350 |
| FLAMMABLE LIMITS: | No data. |
| EXPLOSIVE PROPERTIES: | Not to be expected |
| OXIDIZING PROPERTIES: | Not to be expected |
| SOLUBILITY (WATER): | Insoluble |
| SOLUBILITY (OTHER): | Soluble in many organic solvents |
| PARTITION COEFFICIENT: | 3 Estimated |
| DYNAMIC VISCOSITY (mPa.s): | 25 @ 25° |
| DENSITY (g/ml): | 0.9 @ 20 °C |
| CLOUD POINT (°F): | ≤ 50 |
| CLOUD POINT (°C): | ≤ 10 |

STABILITY AND REACTIVITY

| | |
|---------------------------|--|
| STABILITY: | Stable under normal conditions |
| INCOMPATIBLE MATERIALS: | Strong oxidizing agents. |
| CONDITIONS TO AVOID: | None known. |
| HAZARDOUS DECOMPOSITION: | Thermal decomposition will evolve irritant vapors. |
| HAZARDOUS POLYMERIZATION: | Will not occur. |

TOXICOLOGICAL INFORMATION

EYE CONTACT Rabbit Draize Nonirritating.
SKIN CONTACT: Rabbit Draize Nonirritating.
INGESTION: LD50 rat \geq 2000 mg/kg Relatively harmless.

CHRONIC REPRODUCTIVE
TOXICITY/TERATOGENICITY: A multi-generation study in rats has shown that repeated high doses produce no adverse reproductive effects.

MUTAGENICITY: There is no evidence of mutagenic potential.
Ames test: Negative

TOXICOLOGICALLY
SYNERGISTIC PRODUCTS: None known

ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE & DISTRIBUTION:
PERSISTENCE & DEGRADATION: The substance is essentially insoluble in water.
(OECD 301B) (28 days) 93 %

TOXICITY: LC50 (96 hour) (static) rainbow trout \geq 56 mg/l
LC50 (48 hour) (static) Cyprinus carpio 80 mg/l

DISPOSAL CONSIDERATIONS

RCRA (RESOURCE CONSERVATION AND RECOVERY ACT) CLASSIFICATION:

SPECIFICALLY LISTED WASTES: Not applicable.
CHARACTERISTIC WASTES:
 IGNITABILITY: Not applicable.
 CORROSIVITY: Not applicable.
 REACTIVITY: Not applicable.
 TOXICITY: Not applicable.

DISPOSAL METHOD: Disposal should be in accordance with local, state or national legislation.

CONTAINER DISPOSAL Empty container retains product residue.
Observe all hazard precautions.
Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product.
Remove all product residues from container and puncture, or otherwise destroy empty container, before disposal.

TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION) Not regulated.
TDG (TRANSPORTATION OF DANGEROUS GOODS): Not regulated.

Not classified in RID/ADR - ADNR - IMDG - ICAO/IATA-DGR.

REGULATORY INFORMATION

INVENTORY STATUS:

| | |
|-------------------------|------------|
| EU (EINECS/ELINCS/NLP): | Compliant. |
| USA (TSCA): | Compliant. |
| Canada (DSL): | Compliant. |
| Australia (AICS): | Compliant. |
| Japan (ENCS): | Compliant. |
| China (IECSC): | Compliant. |
| Korea (ECL): | Compliant. |
| Philippines (PICCS): | Compliant. |

OSHA Hazard Communication Standard, 29 CFR 1920.1200, Hazard Summary:

| | |
|-------------------|------|
| Physical Hazards: | None |
| Health Hazards: | None |

WHMIS CLASSIFICATION: Non-controlled / Non-hazardous

CERCLA & SARA REGULATIONS (40 CFR 355, 370, & 372):

This material contains the following chemicals subject to the reporting requirements of SARA 313:

****No SARA 313 Chemicals for this chemical****

SARA 311/312 Hazard Categories:

| | |
|-------------|----|
| Immediate: | No |
| Delayed: | No |
| Fire: | No |
| Pressure: | No |
| Reactivity: | No |

STATE REGULATIONS: Pennsylvania State Chemicals Regulated as Hazardous: 9-Octadecenoic acid (Z)-

OTHER INFORMATION

NFPA ratings and HMIS ratings to this product were assigned based on the hazards of its ingredient(s). Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product MSDS.

| | | |
|-------------------|-------------------|---|
| HMIS Information: | HEALTH: | 1 |
| | FLAMMABILITY: | 1 |
| | PHYSICAL HAZARDS: | 0 |

| | | |
|-------------------|---------------|---|
| NFPA Information: | HEALTH: | 1 |
| | FLAMMABILITY: | 1 |
| | INSTABILITY: | 0 |

This information is intended solely for the use of individuals trained in the particular hazard rating system.

The data herein are based on our current knowledge and believed to be reliable. Acme-Hardesty Co., provides this information without any representation or warranty, expressed or implied, regarding its accuracy or correctness.

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.