REPORT NUMBER: 703

UNIVAR USA INC.
MATERIAL SAFETY DATA SHEET

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PRODUCT: OLEIC ACID / OL-700, OL-710, OL-720, OL-730

ORDER NO: 804277 PROD NO : 682741

SIERRA CHEMICAL 788 NORTHPORT DRIVE

W SACRAMENTO, CA 95691

UNIVAR USA INC.

17425 NE UNION HILL RD , REDMOND

(425)889 - 3400, WA 98052

----- EMERGENCY ASSISTANCE -----

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL - CHEMTREC (800)424 - 9300

PRODUCT NAME:

OLEIC ACID / OL-700, OL-710, OL-720, OL-730

MSDS NUMBER:

P29345VS

DATE ISSUED:

01/12/2002

SUPERSEDES:

10/19/1999

ISSUED BY:

009832

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MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identification Synonyms/Trade Names: (OLEIC ACID / OL-700, OL-710, OL-720, OL-730

Product uses: The most common uses for oleic acid include being used for the production of soaps, oleates, ointments, lubricants, cosmetics, polishing compounds and surface coatings.

Company/undertaking identification

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North America:

The Procter & Gamble Company Procter & Gamble Chemicals Sharon Woods Technical Center 11530 Reed Hartman Highway Cincinnati, Ohio 45241 Department issuing MSDS: Product Safety and Regulatory Affairs 1-800-477-8899

Europe: Procter & Gamble European Supply Company N.V.

P&G Chemicals - Europe

The Heights Brooklands Weybridge Surrey

ENGLAND KT13 OXP

Telephone Number: 01932 - 896000

Emergency Telephone: P&G Ltd. - Brooklands, England: Tel 01932-896000

(day phone) Emergency 0191-279-2000 (day phone)

CHEMTREC 1-800-424-9300 U.S. and Canada 1-703-527-3887 For calls

originating elsewhere

U.S. Emergency, Quality or Service Issues: Call Customer Service 1-800-477-8899 or513-626-6882

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation(mixture): Substance

Saturated and unsaturated straight chain aliphatic monocarboxylic acids, mainly oleic acid.

> EC EC CAS No. Symbols Wt/Wt % EC-No. R-phrases

9-Octadecenoic acid (Z)- 112-80-1 70 - 95 2040071 Not Not applicable applicable

Occupational exposure limits, if applicable, are listed in Section 8. LC/LD50 information is listed in Section 11. Full text of R phrase(s) are listed in section 16.

3. HAZARDS IDENTIFICATION

European Hazard Classification: This product is not classified as dangerous according to Directive 67/548/EEC.

Emergency Overview: Non-Hazardous

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Potential Health Effects:

Eye - Accidental exposure to the eyes will cause only a mild but transient irritation.

Skin - Mild, primary skin irritation with prolonged or repeated contact. Heated product may cause thermal bums if contacted.

Inhalation - Not applicable at ambient temperature.

Ingestion - May cause irritation of gastrointestinal tract.

If product is heated, vaporization can occur. Eye, skin, and upper respiratory irritation may occur.

Physical/Chemical Hazards: None identified.

Environmental Hazards: None identified.

4. FIRST AID MEASURES

Eye - In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin - Wash skin with soap and water upon contact. Remove contaminated clothing. If irritation develops, get medical attention. Wash clothing before reuse.

Inhalation - Avoid breathing dust. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion - If swallowed, do not induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Extinguishing media: SMALL FIRES: Use CO2 or dry chemical.

LARGE FIRES: Use foam.

Unsuitable extinguishing media: Do not use water as an extinguishing media.

Flash Point and method: >356 deg F (>180 deg C) ASTM D 92

Explosive limits in air: Upper: Not available Lower: Not available

Auto-ignition temperature: Not available

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Sensitivity to mechanical impact/static discharge: Not available

Special Protective Equipment: Wear self-contained breathing apparatus and full protective clothing.

Other Fire Fighting Considerations: Cool containers with flooding quantities of water until well after fire is out.

Exposure hazards: Does not decompose up to 400 deg F (204 deg C). Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: An appropriate NIOSH/MSHA approved respirator should be used if a mist or vapor is generated. Wear suitable gloves and eye/face protection. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental Precautions: Minimize contamination of drains, surface and ground waters.

Procedures for Spill/Leak Clean-up: For liquid spills, neutralization is not required. Contain spill. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for disposal. Dispose as any grease or oily material in compliance with Federal, State, and/or Local requirements.

Refer to Section 8 for additional personal protection information. Refer to Section 13 for disposal considerations.

7. HANDLING AND STORAGE

Handling: Handle in accordance with good hygiene and safety procedures. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Since empty containers contain product residue, follow all hazard warnings And precautions even after container is emptied. Keep away from sources of ignition.

Storage: Keep away from possible contact with incompatible substances. Store in resin-lined steel, aluminum, stainless steel, or reinforced fiberglass vessels. Do not store near sources of ignition.

Specific use(s): Follow bulk handling and storage procedures as noted above.

Refer to Section 6 for clean-up of spillages. Refer to Section 13 for

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disposal considerations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

General Precautions: Good industrial hygiene should be followed. Avoid breathing (heated) vapors. Avoid eye and skin contact.

Exposure Limit Values: Not established.

Exposure Controls:

Engineering Controls: Ventilation: Local exhaust - preferred

Mechanical - may be necessary if working at elevated

temperatures or in enclosed areas.

Personal Protective Equipment:

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

Skin - Protective gloves: Rubber or plastic Dependent upon degree of potential exposure, additional personal protective equipment may be required, such as chemical boots and full protective clothing.

Inhalation - 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 NIOSHIMSHA 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 oxygendeficient atmospheres.

Other Controls: Boots, eye wash fountain, safety shower, apron, protective clothing.

Environmental Exposure Controls: Contact Procter and Gamble for specific Community information.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information:

Physical State @ 72 deg F (22 deg C): Liquid

Appearance: Water white to yellowish

Odor: Musty, fatty

Odor Threshold: Not available

Important health, safety and environmental information:

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pH: Not available

Boiling point/Boiling range: >500 deg F (>260 deg C) @ 760 mm Hg

(101.3kPa)

Flash Point & Method: >356 deg F (>180 deg C) ASTM D 92

Flammability (solid, gas): Not available Explosive properties: Not

available

Oxidizing properties: Not available

Vapor pressure: 0 68 deg F (20 deg C) < 0.75 mm Hg Relative density: -0.90 0 20/25 deg C

Freezing point: Not available

Solubility:

Water solubility: Negligible @ 72 deg F (22 deg C)

Fat solubility (solvent-oil to be specified): Not available

Partition coefficient: n-octanol/water: Not available

Viscosity: Not available Vapor density: Not available

Evaporation Rate (nBuoAc=1): Not available

Explosive Limits: Not available

Auto ignition temperature: Not available

Coefficient of water/oil distribution: Not available

10. STABILITY AND REACTIVITY

Stability: Stable under normal operational conditions.

Conditions to Avoid: Not available

Materials to Avoid: Strong oxidizing agents.

Hazardous Decomposition Products: Does not decompose up to 400 deg F (204 deg C). Thermal deco may produce carbon monoxide and/or carbon dioxide.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Oleic acid:

Oral, rat LD50: >21.5 mm/kgSkin irritation, rabbit: Not irritating Eye irritation, rabbit: Not irritating

Skin sensitization:

No sensitization reaction

Linoleic acid Stearic acid Oral, rat LD50: >21.5 ml/kg > 10 gm/kg

12. ECOLOGICAL INFORMATION

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Fathead minnows

96h LC50

205 mg/L

Goldfish

lethal dose:

8 mg/L (sodium salt)

Red killifish

96h LC50

217 mg/L (sodium salt)

13. 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.

14. TRANSPORT INFORMATION

U.S. DOT: Not regulated for transport

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

15. ADDITIONAL REGULATORY INFORMATION

INVENTORY STATUS:

9-Octadecenoic acid (\bar{Z})- TSCA, EINECS, DSL, AUSTRALIA, KOREA, ENCS, PHILIPPINES, CHINA

WGK water class

1-slightly water endangering

EU Classification:

This product is not classified as dangerous according to Directive 67/548/EEC.

Canada

HAZARDOUS INGREDIENTS - WHMIS (Canadian Workplace Hazardous Materials Information System) This product when tested as a whole is not a controlled substance within the meaning of the Hazardous Products Act.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

EUROPE

This product safety data sheet was prepared in compliance with 2001/58/EC.

References: Acute toxicity and irritation studies on a series of fatty acids.

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------ FOR ADDITIONAL INFORMATION -----

CONTACT: MSDS COORDINATOR

UNIVAR USA INC.

DURING BUSINESS HOURS, PACIFIC TIME

(425)889 - 3400

05/15/07 20:04

PRODUCT: 682741 CUST NO: 252504 ORDER NO: 804277

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* * * END OF MSDS * * *