

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Stearic Acid, Vegetable TRV1655MB, TRV1655MBLR

Product Use:

This product is commonly used in the production of soaps, emulsifiers, lubricants, carriers, and soap surfactants.

Manufacturer/Supplier's Name:
TWIN RIVER TECHNOLOGIES

Mailing Address:
780 Washington Street, Quincy, MA 02169

Customer Contact Phone:
888-929-8780

Customer Website:
www.twinrivertechnologies.com

Emergency Telephone Number:

Please call TRT's Emergency Response Service Company, VelocityEHS: Reference TRT's Contract # MIS9075839

US, Canada, Puerto Rico, & the U.S. Virgin Islands Emergency #:1-800-255-3924

General International Emergency #s:1-800-255-3924 or 1-813-248-0585

Australia: 1-300-954-583 Brazil: 0-800-591-6042 Mexico: 800-099-0731

India: 000-800-100-4086 China: 400-120-0751

2. HAZARDS IDENTIFICATION

GHS – not a controlled product under Global Harmonized Systems

• European Hazard Classification: This product is not classified as dangerous according to Directive

67/548/EEC.

• Emergency Overview: North America Non- Hazardous

• 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 burns 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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation (mixture): Substance

NameCAS No.Wt/Wt %EC No.EC SymbolsEC R-phrasesFatty Acids, C16-18 and C18 unsaturated67701-03-51002669285Not applicableNot applicable

Occupational exposure limits, if applicable, are listed in Section 8.

LC/LD50 information is listed in Section 11.

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: 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: >360° F (>180° C) PMCC

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

• Auto-ignition temperature: Not available

• 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° F (204° 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, vapor or

dust 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: Neutralization 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 and can be dangerous, 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. Should be stored

in resin-lined steel, aluminum, stainless steel, or reinforced fiberglass vessels. Do

not store near possible 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 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, vapor or dust 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.

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

clothing.

• Environmental Exposure

Controls: Contact Twin Rivers Technologies for specific Community

information.

9. PHYSICAL AND CHEMICAL PROPERTIES

• General Information:

Physical State at 72° F (22° C): Solid Appearance: Water white Odor: Musty, fatty Odor Threshold: Not available

• Important health, safety and environmental information:

Boiling point/Boiling range: Over 500° F (260° C) @ 760 mm Hg (101.3kPa)

Flash Point & Method: 408° F (208.9° C) PMCC

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

Vapor pressure: @ 72° F (22° C) < 0.75 mm Hg

Relative density: 0.85 - 0.90 @ 49/25° C

Freezing point: Not available

Solubility: Water solubility: Negligible @ 72° F (22° 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 procedures.

• Conditions to Avoid: None identified.

• Materials to Avoid: Avoid strong oxidizing agents.

Does not decompose up to 400° F (204° C). Themal decomposition or burning may • Hazardous Decomposition Products:

produce carbon monoxide and/or carbon dioxide.

Will not occur. • Hazardous Polymerization:

11. TOXICOLOGICAL INFORMATION

IRRITATION DATA Stearic Acid **Palmitic Acid** Eye, rabbit Not irritating Not irritating Skin, rabbit Not irritating Not irritating** 500 mg/24H MOD*

Skin, human 75 mg/3D-I MLD 75 mg/3D-I MLD

ACUTE TOXICITY: Palmitic Acid Stearic Acid Oral, rat LD50 >10 gm/kg>10 gm/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fishes: Palmitic Acid Stearic Acid

Goldfish (lethal dose) 11 mg/l (sodium salt) 14 mg/l (sodium salt) Red killifish 96h LD50 150 mg/l (sodium salt) 125 mg/l (sodium salt)

Aquatic Invertebrates

Daphnia magna: Palmitic and stearic acids; not acutely toxic to Daphnia Magna at concentrations within its aqueous solubility (water hardness of 215 & 54 mg/L CACO₃).

Algae:Palmitic AcidStearic AcidScenedesmus subspicatus EC50Not available> 1016 mg/lScenedesmus subspicatus NOECNot available> 1016 mg/l

Biodegradation

Sodium stearate: 89% in 28 days "Sealed Vessel Test" (Modified Sturm Test)

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

15. ADDITIONAL REGULATORY INFORMATION

INVENTORY STATUS:

Listed on TSCA (USA), AICS (Australia), DSL (Canada), EINECS (EU), IECSC (China), KECI (Korea), New Zealand (Composite List of Single Component Substances to be considered for Transfer (April 2003)), PICCS (Philippines)

California Proposition 65 Components: None

WGK water endangering class 1, slightly water endangering

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 SDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

EUROPE

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

References: RTECS ACCESSION NUMBER RT4550000 – Palmitic acid

*RTECS ACCESSION NUMBER WI2800000 - Stearic acid

**Acute toxicity and irritation studies on a series of fatty acids. J. Am. Oil Chem. Soc., 56 (1979), p. 760A.

K. Verschueren. Handbook of environmental data on organic chemicals, 3rd ed. (1998).

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 Twin Rivers Technologies 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 or any other process. Twin Rivers Technologies 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 Safety Data Sheet complies with OSHA/EPA/EU Standards and Requirements