



MATERIAL SAFETY DATA SHEET

Emergency Phone: 800-323-4274

Section I - Identification

Product: Energy Booster 100
Synonyms: EB 100
Chemical: Aliphatic Acid
CAS Number: 57-11-4
SARA Hazard: None noted (Section 311/312)
Title III Section 313 – Not Listed

Section II – Ingredients and Hazard Classification

<u>Composition</u>	<u>%</u>	<u>PeI/TLV</u>	<u>Hazard</u>
Palmitic Acid (57-10-3)	34	None/None	None Noted
Stearic Acid (57-11-4)	50	None/None	None Noted
Oleic Acid (112-80-1)	10	None/None	None Noted
Myristic Acid (544-63-8)	3	None/None	None Noted

Section III - Health Hazard Information

Inhalation: Unknown

Ingestion: LD50: >10 g/Kg (Albino Rats) (Stearic and Palmitic Acids)
LD50: > 21.5 ml/Kg (Male Albino Rats) (Oleic Acid)

Eye Contact: Stearic-Palmitic mixtures produced only mild conjunctival erythema in two of six rabbits at the 24 and 48-hour readings. No other signs of irritation were observed. All signs of irritation had subsided completely at the 72-hour reading.

Skin Contact: Exposure to Stearic-Palmitic acid mixtures caused no sign of irritation or corrosivity at either intact or abraded sites on albino rabbits. Exposure to Oleic acid resulted in very slight erythema in six intact and six abraded sites on albino rabbits at the 24-hour reading only. No edema was observed at either observation.

Primary irritation index was 0.0-0.5.

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Skin Contact Cont.: 75 mg of Stearic acid applied intermittently to human skin over a 3-day period resulted in mild irritation. 500 mg of Stearic acid applied to rabbit skin over a 24-hour period resulted in moderate irritation.

15 mg of Oleic acid intermittently applied to human skin over a 3-day period resulted in moderate irritation. 500 mg of Oleic acid applied to rabbit skin in an open draize test resulted in mild irritation.

Section IV – Occupational Exposure Limits

PEL: No OSHA PEL

TLV: No ACGIH TLV

Section V - Emergency First Aid Procedures

- For over exposure by Ingestion: Call a physician or poison control center promptly.
- For overexposure by Skin Contact: Wash affected area. Call physician if needed.
- For over exposure by Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes. Do not let victim rub eyes. Get medical attention immediately.
- For over exposure by Inhalation: Immediately remove victim to fresh air. If victim has stopped breathing, give artificial respiration, preferably by mouth to mouth. Get medical attention immediately.

Section VI - Physical Data

Boiling Point: 721°F (383°C) (Approximately)
Melting Point: 50°C (Minimum)
Vapor Pressure: 10 mm Hg pressure @ 225°C (Approximately)
Specific Gravity: 0.85 @ 75/20°C (Approximately)
Solubility in Water: Insoluble



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Appearance and Color: Brown prill with fatty acid odor.

Section VII - Fire and Explosion Hazards

Flash Point and Method Used:	365°F (185°C) C.O.C.
Flammable Limits in Air (% by volume):	Lower: Not established Upper: Not established
NFPA Rating:	Health (1) Fire (1) Reactivity (0) (For Stearic Acid)
HMIS Rating:	Health (1) Fire (1) Reactivity (0)

Special Fire Fighting Procedures and Precautions:

(Individuals should perform only those fire-fighting procedures for which they have been trained). Water or foam may cause frothing when applied to flammable liquids having flash points above 212°F (100°C). The remark is included only as a precaution and does not mean that water or foam should not or could not be used in fighting fires in such liquids. The frothing may be quite violent and could endanger the life of the fire fighter particularly when solid streams are directed into the hot burning liquid. On the other hand, water spray carefully applied has frequently been used with success in extinguishing such fires by causing the frothing to occur only on the surface and this foaming action blankets and extinguishes the fire. (NFPA 325M-1984)

Unusual Fire and Explosion Hazards:

Fire fighters should wear self-contained breathing apparatus in the positive-pressure mode with a full face piece when there is a possibility of exposure to smoke, fumes or other hazardous decomposition products.

Section VIII - Reactivity Data

Stability:	Generally stable.
Hazardous Polymerization:	None likely.
Conditions and Materials to Avoid:	Avoid contact with strong oxidizing agents and strong alkalis.
Hazardous Decomposition Products:	Decomposition may produce Carbon Dioxide(CO ₂) and Carbon Monoxide (CO)



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Section IX - Employee Protection

Control Measures:

Handle in the presence of adequate ventilation.

Respiratory Protection:

Recommended exposure limits (i.e.: OSHA-PEL and ACGIH-TLV) have not been established for this material. Whether there is a need for respiratory protection under your conditions of handling of this material should be evaluated by a qualified health specialist.

Protective Clothing:

Wear gloves and protective clothing, which are impervious to the product, for the duration of anticipated exposure if there is potential for prolonged or repeated skin contact.

Eye Protection:

Wear safety glasses meeting the specifications of ANSI Standard Z87.1 where no contact with the eye is anticipated. Wear chemical safety goggles meeting the specifications of ANSI Standard Z87.1 should be worn whenever there is the possibility of splashing or other contact with the eyes.

Other Protective Equipment:

Eyewash and safety shower.

Section X - Environmental Protection

Environmental Precautions:

Avoid uncontrolled release of this material. Where spills are possible, a comprehensive spill response plan should be developed and implemented. Dispose of spilled material according to federal, state and local regulations.

Spill or Leak Precautions:

Wear appropriate respiratory protection and protective clothing as described in Section IX. Contain spilled material. Transfer to secure containers. In the event of an uncontrolled release of this material, the user should determine if the release is reportable under applicable laws and regulations.

Waste Disposal:

All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.



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Section XI – Regulatory Controls

Department of Transportation:

DOT Classification: Not Regulated

DOT Proper Shipping Name: Not Regulated

Other DOT Information: Not Regulated

Other Regulatory Requirements: Listed in TSCA Inventory

CERCLA Hazardous Materials: None Noted

Section XII – Precautions: Handling, Storage and Usage

There are no special precautions necessary.

Keep in covered or closed containers and do not store near heat or open flames to preserve the color and odor characteristics of this product.

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which MSC bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

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