GARDENA, CA
NEW BRUNSWICK, NJ

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
	Health Hazard 2 Fire Hazard 1 Reactivity 0	 See Section 15.

Section 1. Chemical Product and Company Identification

Common Name/ Trade Name	**+/--2-Ethylhexanoic acid**
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248
Commercial Name(s)	Not available.
Synonym	2-Butylbutanoic acid; 2-Ethylcaproic acid; 2-Ethylhexanoic acid; 2-Ethylhexoic acid; 3-Heptanecarboxylic acid; Butylethylacetic acid
Chemical Name	Hexanoic acid, 2-ethyl-
Chemical Family	Not available.
Chemical Formula	C8-H16-O2
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248

Catalog Number(s).	E2833
CAS#	149-57-5
RTECS	MO7700000
TSCA	TSCA 8(b) inventory: +/--2-Ethylhexanoic acid
CI#	Not available.

IN CASE OF EMERGENCY
CHEMTREC (24hr) 800-424-9300

CALL (310) 516-8000

Section 2.Composition and Information on Ingredients

		Exposure Limits			
Name	**CAS #**	**TWA (mg/m^3)**	**STEL (mg/m^3)**	**CEIL (mg/m^3)**	**% by Weight**
1) {+/-}{-2-}Ethylhexanoic acid	149-57-5				100

Toxicological Data on Ingredients

+/--2-Ethylhexanoic acid:
ORAL (LD50): Acute: 3000 mg/kg [Rat].
VAPOR (LC50): Acute: >400 ppm 6 hours [Rat].

Section 3. Hazards Identification

Potential Acute Health Effects

Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of ingestion. Corrosive to skin and eyes on contact. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.

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Potential Chronic Health Effects	Slightly hazardous in case of skin contact (sensitizer). **CARCINOGENIC EFFECTS**: Not available. **MUTAGENIC EFFECTS**: Not available. **TERATOGENIC EFFECTS**: Not available. **DEVELOPMENTAL TOXICITY**: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [SUSPECTED]. The substance may be toxic to the reproductive system, mucous membranes, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Not available.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	371°C (699.8°F)
Flash Points	OPEN CUP: 118°C (244.4°F).
Flammable Limits	LOWER: 0.8% UPPER: 6%
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

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Section 6. Accidental Release Measures

Small Spill	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill	Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Precautions	Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, alkalis.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.	**Odor**	mild
Molecular Weight	144.21 g/mole	**Taste**	Not available.
pH (1% soln/water)	Not available.	**Color**	Clear Colorless.

Boiling Point	228°C (442.4°F)
Melting Point	-59°C (-74.2°F)
Critical Temperature	Not available.
Specific Gravity	0.9031 (Water = 1)
Vapor Pressure	0 kPa (@ 20°C)
Vapor Density	5 (Air = 1)
Volatility	Not available.
Odor Threshold	Not available.
Water/Oil Dist. Coeff.	The product is more soluble in oil; log(oil/water) = 2.6
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water, diethyl ether.

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Solubility	Soluble in diethyl ether. Very slightly soluble in cold water. Solubility in Water: 1.4 g/l @ 25 deg. C.; 0.2% @ 20 deg. C Soluble in carbon tetrachloride. Slightly soluble in ethanol.

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat, incompatible materials.
Incompatibility with various substances	Reactive with oxidizing agents, reducing agents, alkalis.
Corrosivity	Not available.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact.
Toxicity to Animals	**WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.** Acute oral toxicity (LD50): 3000 mg/kg [Rat]. Acute toxicity of the dust (LC50): >400 6 hours [Rat].
Chronic Effects on Humans	**DEVELOPMENTAL TOXICITY**: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [SUSPECTED]. May cause damage to the following organs: the reproductive system, mucous membranes, skin, eyes.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of ingestion.
Special Remarks on Toxicity to Animals	Lethal Dose Conc/50% Kill: LD50 [Rabbit] - Route: Skin; Dose: 1260 ul/kg LD50 [Guinea Pig] - Route: Skin; Dose: 6300 ul/kg
Special Remarks on Chronic Effects on Humans	May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data. May affect genetic material (mutagenic)
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Causes skin irritation. It may be absorbed through the skin. It may be harmful if absorbed through the skin. However, a single prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts. Eyes: Causes moderate to severe eye irritation. It may cause corneal damage followed by prompt healing. Inhalation: It may cause respiratory tract irritation with burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Inhalation of large amounts may be fatal as a result of spasm, inflammation, and edema of the larynx, and bronchi, chemical pneumonitis, and pulmonary edema. Ingestion: It may cause gastrointestinal tract irritation with nausea, vomiting, and diarrhea. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may cause defatting and dermatitis. Ingestion: Prolonged or repeated ingestion may affect the liver, blood, and metabolism.

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Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Disposal Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification	Not a DOT controlled material (United States).
Identification	Not applicable.
Special Provisions for Transport	Not applicable.
DOT (Pictograms)	

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations

TSCA 8(b) inventory: +/--2-Ethylhexanoic acid
TSCA 8(a) IUR: +/--2-Ethylhexanoic acid
TSCA 8(d) H and S data reporting: +/--2-Ethylhexanoic acid: Effective Date: 6/28/84; Sunset Date: 6/28/94

California Proposition 65 Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations

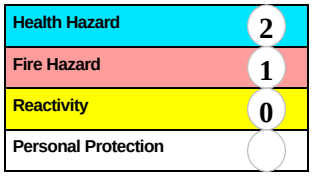
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications

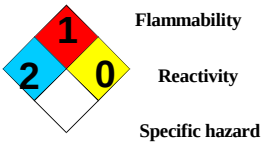
WHMIS (Canada) CLASS E: Corrosive liquid.

DSCL (EEC) R63- Possible risk of harm to the unborn child. S36/37- Wear suitable protective clothing and gloves.

HMIS (U.S.A.)



National Fire Protection Association (U.S.A.)



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WHMIS (Canada) (Pictograms)

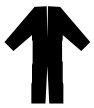
DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Equipment

Gloves.



Full suit.

Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Face shield.

Section 16. Other Information

MSDS Code	**E0179**
References	Not available.
Other Special Considerations	Not available.

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

Printed 9/12/2006.

CALL (310) 516-8000

Notice to Reader

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