

Material Safety Data Sheet

2-Ethylhexanoic acid, p.a.

ACC# 63580

Section 1 - Chemical Product and Company Identification

MSDS Name: 2-Ethylhexanoic acid, p.a.

Catalog Numbers: AC220430000, AC220431000

Synonyms: Butylethylacetic acid; 2-Butylbutanoic acid; Clobuzarit alpha-Ethylcaproic acid; 2-Ethylcaproic acid; 2-EHA; Ethylhexanoic acid; alpha-Ethylhexanoic acid; 2-Ethylhexoic acid; Ethylhexoic acid; 3-Heptanecarboxylic acid; Octanoic acid.

Company Identification:

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
149-57-5	2-Ethylhexanoic acid	100	205-743-6

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid.

Warning! Causes eye irritation. May be harmful if absorbed through the skin. May cause skin and respiratory tract irritation. Possible risk of harm to the unborn child.

Target Organs: Eyes, reproductive system, skin, mucous membranes.

Potential Health Effects

Eye: Causes eye irritation. A case of corneal injury followed by prompt healing has been reported.

Skin: Causes skin irritation. A single prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: May cause respiratory tract irritation.

Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis. Possible risk of harm to the unborn child.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid. Wash clothing before reuse.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 118 deg C (244.40 deg F)

Autoignition Temperature: 371 deg C (699.80 deg F)

Explosion Limits, Lower: .80 vol %

Upper: 6.00 vol %

NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Avoid breathing vapor or mist.

Storage: Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Ethylhexanoic acid	5 mg/m3 TWA (inhalable fraction and vapor)	none listed	none listed

OSHA Vacated PELs: 2-Ethylhexanoic acid: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: clear, colorless

Odor: mild odor

pH: acidic

Vapor Pressure: 0.03 mm Hg @ 20 deg C

Vapor Density: 4.98 (air=1)

Evaporation Rate: Not available.

Viscosity: 7.73 cps

Boiling Point: 228 deg C @ 760 mm Hg

Freezing/Melting Point: -59 deg C

Decomposition Temperature: Not available.

Solubility: Slightly soluble.

Specific Gravity/Density: 0.903 g/ml @ 25°C

Molecular Formula: C₈H₁₆O₂

Molecular Weight: 144.21

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents, reducing agents, strong bases.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 149-57-5: MO7700000

LD50/LC50:

CAS# 149-57-5:

Dermal, guinea pig: LD50 = 6300 uL/kg;

Draize test, rabbit, eye: 20 mg Severe;

Oral, rat: LD50 = 3 gm/kg;

Skin, rabbit: LD50 = 1260 uL/kg;

Rabbit LD50 Skin; 1260 uL/kg = 1138 mg/kg. a pig LD50 Skin; 6300 uL/kg = 5689 mg/kg. t Skin open Draize test: 450 mg; Reaction: Mild. t necrosis with subsequent eschar formation (slight to moderate) was observed in 5 of 6 New Zealand white rabbits 4 hours after application of undiluted 2-ethylhexanoic acid.

Carcinogenicity:

CAS# 149-57-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: The results of a study on workers' with occupational exposure provided evidence that very little 2-EHA was absorbed through the skin during its application as a wood preservative.

Teratogenicity: See actual entry in RTECS for complete information.

Reproductive Effects: TLV-TWA=5 mg/m3, inhalable vapor & aerosol, is recommended for 2-EHA, based on reports of developmental toxicity in rats. Postulated mechanism (induction of metallothionein w/associated induction of fetal zinc deficiency) is potentially relevant to humans.

Mutagenicity: No information found

Neurotoxicity: No information found

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: 2-Ethylhexanoic acid is not expected to volatilize from dry soil surfaces based on a measured vapor pressure of 0.03 mm Hg. 2-Ethylhexanoic acid has the potential to biodegrade in soil, based on anaerobic and aerobic biodegradation studies. According to a classification scheme, an estimated BCF value of 60, from a measured log Kow, suggests that bioconcentration in aquatic organisms is moderate, not high. 2-Ethylhexanoic acid has the potential to biodegrade in aquatic systems, based on anaerobic and aerobic biodegradation studies.

Physical: According to a model of gas/particle partitioning of semivolatile organic compounds in the atmosphere, 2-ethylhexanoic acid, which has a measured vapor pressure of 0.03 mm Hg at 20 deg C, is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase 2-ethylhexanoic acid is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the half-life for this reaction in air is estimated to be about 2.0 days.

Other: An estimated BCF value of 60 was calculated for 2-ethylhexanoic acid, using a measured log Kow of 2.64 and a recommended regression-derived equation. According to a classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is moderate, not high.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 149-57-5 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 149-57-5: Effective 6/28/84, Sunset 6/28/94

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 149-57-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 63 Possible risk of harm to the unborn child.

Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection)

CAS# 149-57-5: 1

Canada - DSL/NDSL

CAS# 149-57-5 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2A, D2B.

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

Canadian Ingredient Disclosure List

CAS# 149-57-5 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 6/24/1999

Revision #5 Date: 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.