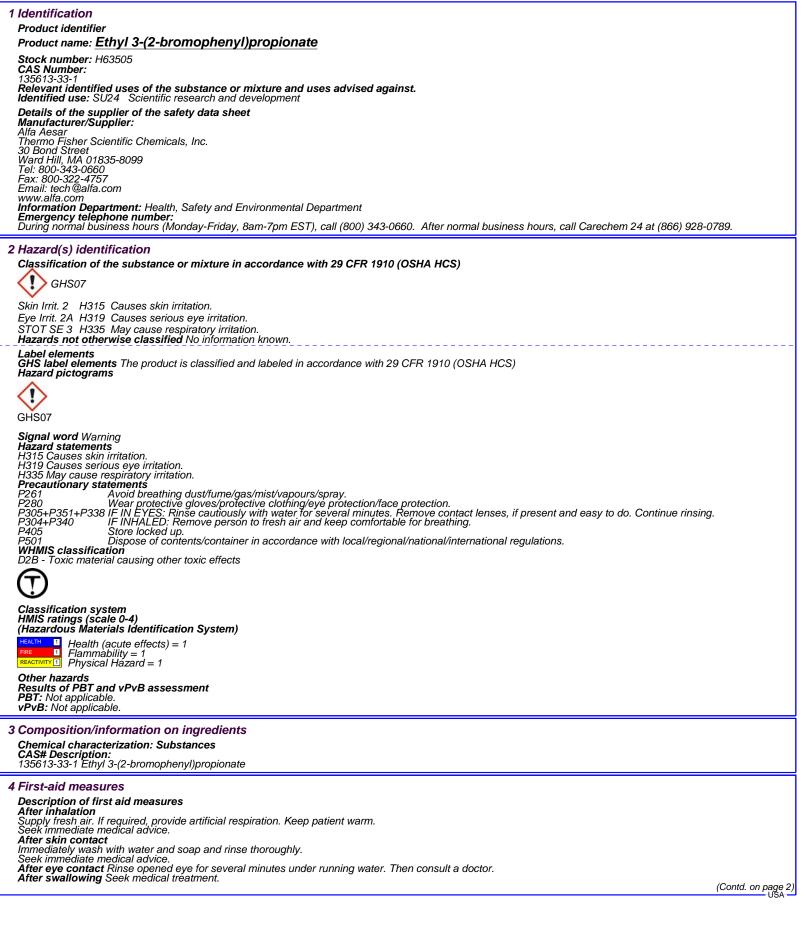


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Product name: Ethyl 3-(2-bromophenyl)propionate

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Information for doctor

Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Hydrogen bromide (HBr) Advice for firefighters

Protective equipment: Wear self-contained respirator.

Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away Ensure adequate ventilation

Ensure adequate ventilation Environmental precautions: Do not allow product to reach sewage system or any water course. Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation. Prevention of secondary hazards: No special measures required. Reference to other sections See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Information about protection against explosions and fires: No information known. Conditions for safe storage, including any incompatibilities Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data

Exposure controls

Personal protective equipment General protective and hygienic measures

General protective and nyglenic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Do not inhale dust / smoke / mist. Avoid contact with the eyes and skin. Maintain an erronomically appropriate working environment

Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands:

Impervious gloves

Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Penetration time of glove material (in minutes) Not determined

Eye protection: Safety glasses Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and cl General Information Appearance: Form: Color: Odor: Odor threshold:	hemical properties Liquid Pale yellow Not determined Not determined.
pH-value:	Not determined.
Change in condition Melting point/Melting range: Boiling point/Boiling range: Subimation temperature / start: Flammability (solid, gaseous)	Not determined Not determined Not determined Not determined.

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		(Contd. of page
Ignition temperature:	Not determined	,,,, puge
Decomposition temperature:	Not determined	
Auto igniting:	Not determined.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower: Upper:	Not determined Not determined	
Vapor pressure:	Not determined	
Density:	Not determined	
Relative density	Not determined.	
Vapor density Evaporation rate	Not determined. Not determined.	
Solubility in / Miscibility with	Not determined.	
Water:	Not determined	
Partition coefficient (n-octanol/wat	xer): Not determined.	
Viscosity: dynamic:	Not determined.	
kinematic:	Not determined.	
Other information	No further relevant information available.	
0 Stability and reactivity		
Reactivity No information known.		
Chemical stability Stable under reco	ommended storage conditions.	
Thermal decomposition / condition Possibility of hazardous reactions	ns to be avoided: Decomposition will not occur if used and stored according to specifications.	
Conditions to avoid No further relev	incacia with strong Unitarity agents in an information available.	
Incompatible materials: Oxidizing a	igents	
Hazardous decomposition product	ts:	
Carbon monoxide and carbon dioxide Hydrogen bromide	2	
· •		
1 Toxicological information		
Information on toxicological effect	s	
Acute toxicity: No effects known.		
LD/LC50 values that are relevant for		
Skin irritation or corrosion: Causes		
Eye irritation or corrosion: Causes	serious eye irritation.	
Sensitization: No sensitizing effects Germ cell mutagenicity: No effects	KIOWI.	
Carcinogenicity: No classification da	ata on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Reproductive toxicity: No effects kr	nown	
Specific target organ system toxic	ity - repeated exposure: No effects known.	
Specific target organ system toxic	ity - single exposure: May cause respiratory irritation.	
Aspiration hazard: No effects known Subacute to chronic toxicity: No ef	n. Facto known	
Additional toxicological informatio	ne to the best of our knowledge the acute and chronic toxicity of this substance is not fully known.	
2 Ecological information		
Toxicity		
Aquatic toxicity: No further relevant	information available.	
Persistence and degradability No f	urther relevant information available.	
Bioaccumulative potential No furthe Mobility in soil No further relevant in	er relevant information available. aformation available	
Additional ecological information:		
General notes:		
Do not allow undiluted product or larc	ge quantities to reach ground water, water course or sewage system.	
Avoid transfer into the environment. Results of PBT and vPvB assessm	port.	
PBT: Not applicable.	icin.	
vPvB: Not applicable.		
Other adverse effects No further rel	evant information available.	
3 Disposal considerations		
-		
Waste treatment methods Recommendation Consult state loc	al or national regulations to ensure proper disposal.	
Uncleaned packagings:		
Recommendation: Disposal must be	e made according to official regulations.	
4 Transport information		
LIN-Numbor	Not applicable	
UN-Number DOT, ADN, IMDG, IATA		
DOT, ADN, IMDG, IATA		
DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable	
DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es)		
DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA	Not applicable	
DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class		
DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class	Not applicable Not applicable	
DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class Packing group DOT, IMDG, IATA	Not applicable Not applicable Not applicable	
DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class Packing group DOT, IMDG, IATA Environmental hazards:	Not applicable Not applicable Not applicable Not applicable Not applicable.	
DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class Packing group DOT, IMDG, IATA Environmental hazards: Special precautions for user	Not applicable Not applicable Not applicable Not applicable Not applicable. Not applicable. Not applicable. Not applicable.	
DOT, ADN, IMDG, IATA UN proper shipping name DOT, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class Packing group DOT, IMDG, IATA Environmental hazards: Special precautions for user	Not applicable Not applicable Not applicable Not applicable Not applicable.	(Contd. on page

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Product name: Ethyl 3-(2-bromophenyl)	propionate
	(Contd. of page 3
Transport/Additional information:	
DOT Marine Pollutant (DOT):	No
UN "Model Regulation":	-
15 Regulatory information	
Safety, health and environmental regulatio GHS label elements The product is classified Hazard pictograms	ons/legislation specific for the substance or mixture d and labeled in accordance with 29 CFR 1910 (OSHA HCS)
GHS07	
P305+P351+P338 IF IN EYES: Rinše cautiou P304+P340 IF INHALED: Remove pers P405 Store locked up. P501 Dispose of contents/contai National regulations This product is not listed in the U.S. Environm to research and development only. This produ product must not be used for commercial pury This product is not listed on the Canadian Do SARA Section 313 (specific toxic chemical California Proposition 65 Prop 65 - Chemicals known to cause cance Prop 65 - Developmental toxicity, substance Prop 65 - Developmental toxicity, male Sub Information about limitations and prohibiti Substance of Very High Concern (SVHC) a The conditions of restrictions according to market and use must be observed. Substance is not listed.	ofective clothing/eyé protection/face protection. usly with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. son to fresh air and keep comfortable for breathing. iner in accordance with local/regional/national/international regulations. mental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricte uct must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This poses or in formulations for commercial purposes. mestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL). I listings) Substance is not listed. er Substance is not listed. es not listed. bustance is not listed. e only by technically qualified individuals. ive regulations for commercial (EC) No. 1907/2006. Substance is not listed. o Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the uiring Authorisation for use) Substance is not listed.
information to ensure proper use and protect to conformance with this Material Safety Data SI Department issuing SDS: Global Marketing Date of preparation / last revision 11/24/20	s a supplement to other information gathered by them, and should make independent judgement of suitability of this the health and safety of employees. This information is furnished without warranty, and any use of the product not in heet, or in combination with any other product or process, is the responsibility of the user. Department 15 / -
DOT: US Department of Transportation CAS: Chemical Abstracts Service (division of the American C HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System	angereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) Chemical Society) n (Canada)
LD50: Lethal dose, 50 percent VPVB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hy OSHA: Occupational Safety and Health Administration (USA, NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer	rgienists (USA)

NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)