



1 Identification

Product identifier Product name: (+/-)-2-Phenyl-1-propanol

Stock number: B23473, L18598 CAS Number: 1123-85-9 EC number: 214-379-7 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development Details of the supplier of the safety data sheet Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. Inerrito Fisher Scheman C. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 Email: tech @alfa.com www.alfa.com Information Department: Health, Safety and Environmental Department Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)



Acute Tox. 4 H302 Harmful if swallowed. Hazards not otherwise classified No information known.

Label elements

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms



Signal word Warning

Hazard statements H302 Harmful if swallowed. Precautionary statements P280 Wear protective clothing. WHMIS classification Not controlled Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)



Other hazards Results of PBT and vPvB assessment **PBT:** Not applicable. **vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances Chemical characterization: Case Description: 1123-85-9 (+/-)-2-Phenyl-1-propanol Identification number(s): EC number: 214-379-7

4 First-aid measures

Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. eek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. 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: Or how manageride and earth and the following can be released:

Carbon monoxide and carbon dioxide

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Advice for firefighters

Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

6 Accidental release measures

Flammability (solid, gaseous) Ignition temperature: Decomposition temperature:

Upper: Vapor pressure at 20 °C (68 °F): Density at 20 °C (68 °F): Relative density

Auto igniting:

Vapor density Evaporation rate

Lower:

Danger of explosion: Explosion limits:

Not determined. 425 °C (797 °F) Not determined

Not determined

Not determined. Not determined

7.2 V01 % <1 hPa (<1 mm Hg) 0.97 g/cm³ (8.095 lbs/gal) Not determined

1.2 Vol %

Product does not present an explosion hazard.

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away Ensure adequate ventilation Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to section 13. 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 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. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves 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 chemical properties General Information Appearance: Form: Color: Liquid Colorless Odor: Not determined Odor threshold: Not determined. pH-value: Not determined. Change in condition -37 ℃ (-35 °F) 220 ℃ (428 °F) Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined 108 °C (226 °F) Flash point:

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	Rev	viewed on 01/28/2014
roduct name: (+/-)-2-Phenyl-1-prop	anol	
		(Contd. of page 2)
Solubility in / Miscibility with		
Water: Partition coefficient (n-octanol/water):	Not miscible or difficult to mix : Not determined.	
Viscosity: dynamic:	Not determined.	
kinematic:	Not determined.	
Other information	No further relevant information available.	
10 Stability and reactivity		
Reactivity No information known.		
Chemical stability Stable under recomm Thermal decomposition / conditions tr	nended storage conditions. o be avoided: Decomposition will not occur if used and stored according to specifications.	
Possibility of hazardous reactions No Conditions to avoid No further relevant	dangerous reactions known	
Incompatible materials: Oxidizing agen	nts	
Hazardous decomposition products: (Carbon monoxide and carbon dioxide	
11 Toxicological information		
Information on toxicological effects Acute toxicity:		
Harmful if swållowed.	10 / (DTEOD) and the and the set to be the set to be	
LD/LC50 values that are relevant for c	al Substances (RTECS) contains acute toxicity data for this substance.	
Oral LD50 1600 mg/kg (mouse)		
1500 mg/kg (rat) Dermal LD50 >5 gm/kg (rabbit)		I
Skin irritation or corrosion: May cause	e irritation	
Eve irritation or corrosion: May cause	irritation	
Sensitization: No sensitizing effects kno Germ cell mutagenicity: No effects kno	$\frac{1}{2}$	
Carcinogenicity: No classification data Reproductive toxicity: No effects know	on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Specific target organ system toxicity - Specific target organ system toxicity -	- repeated exposure: No effects known.	
Asniration hazard: No effects known	· Single exposure. No enects known.	
Subacute to chronic toxicity: The Registry of Toxic Effects of Chemica	al Substances (RTECS) reports the following effects in laboratory animals:	
Liver - čhanges in liver weight. Kidney, Ureter, Bladder - changes in blad		
Kidnov I Irotor Bladdor - changes in kidi	nev weight	
Nutritional and Gross Metabolic - weight Blood - changes in erythrocyte (RBC) co	loss of decreased weight gain. Junt.	
The Registry of Toxic Effects of Chemica	al Substances (RTECS) contains multiple dose toxicity data for this substance.	
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.	
12 Ecological information		
Toxicity		
Aquatic toxicity: No further relevant info Persistence and degradability No furth	ner relevant information available.	
Bioaccumulative potential No further re Mobility in soil No further relevant inform	elevant information available.	
Additional ecological information:		
General notes: Do not allow material to be released to the	he environment without proper governmental permits.	
Do not allow undiluted product or large q Avoid transfer into the environment.	quantities to reach ground water, water course or sewage system.	
Results of PBT and vPvB assessment PBT: Not applicable.	t	
vPvB: Not applicable.		
Other adverse effects No further releva	Int information available.	
13 Disposal considerations		
Waste treatment methods	or national regulations to ensure proper disposal.	
Uncleaned packagings:		
Recommendation: Disposal must be ma	ade according to official regulations.	
14 Transport information		
UN-Number DOT, ADN, IMDG, IATA	Not applicable	
UN proper shipping name	ινοι αμμικανισ	
DOT, ADN, IMDG, ĬATA	Not applicable	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
Packing group DOT, IMDG, IATA		
	Not applicable	
Environmental hazards:	Not applicable.	
Special precautions for user Transport in bulk according to Annex	Not applicable. Il of MARPOL73/78 and the IBC Code Not applicable.	
Hansport III buik according to Armos		(Contd. on page 4)
		USA -

Safety Data Sheet per OSHA HazCom 2012

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Product name: (+/-)-2-Phenyl-1-propanol	
(Contd. of	f page
Transport/Additional information:	
DOT Marine Pollutant (DOT): No	
UN "Model Regulation": -	
15 Regulatory information	
Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms	
GHS07	
Signal word Warning Hazard statements H302 Hamiful if swallowed. Precautionary statements P280 Wear protective clothing. National regulations All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory. All components of this product are listed on the Canadian Domesic Substances List (DSL). SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity, substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, famile Substance is not listed. Prop 65 - Developmental toxicity for the Substance is not listed. Prop 65 - Developmental toxicity for the Substance is not listed. Prop 65 - Developmental toxicity for the Substance is not listed. Prop 65 - Developmental toxicity for the substance is not listed. Prop 65 - Developmental toxicity for the substance is not listed. The conditions of restrictions according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing of market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.	on th
16 Other information Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of to information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product no conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.	this tot in
Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/23/2015 / - Abbreviations and acronyms: RID: Redement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO: In Technical Instructions by the "International Civil Aviation Organization" (ICAO) ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) DOT: US Department of Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)	
DDT: US Department of Transportation EINECS: European Inventory of Existing Commercial Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Vorkplace Hazardous Materials Information System (Canada) LC50: Lethal dose, 50 percent LD50: Lethal dose, 50 percent vPvB: very Persistent and very Bioaccumulative ACCIL	
WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal ocneentration, 50 percent UD50: Lethal dose, 50 percent vPvB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	- USA