

Safety Data Sheet per OSHA HazCom 2012

	Reviewed on 05/27/2010
1 Identification	
Product identifier Product name: (R)-2-Amino-3-benzyloxy-1-propanolhydrochloride	
Stock number: H52302	
CAS Number: 58577-95-0 Polouont identified uses of the substance or mixture and uses advised against	
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 The Annual Alfa Aesar The Annual Alfa Aesar Annual Annua	
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 Carecherr	o 24 at (866) 928-0789.
2 Hazard(s) identification	
Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)	
GHS07	
Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation.	
STOT SE 3 H335 May cause respiratory irritation. 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	
GHS07	
Signal word Warning Hazard statements	
H315 Causes skin irritation. H319 Causes serious eye irritation.	
H335 May cause respiratory irritation. Precautionary statements	
P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection.	· Continuo ringing
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P405 Store locked up.). Conunue rinsing.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification	
D2B - Toxic material causing other toxic effects	
$(\underline{\mathbf{T}})$	
Classification system	
HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	
HEALTH I Health (acute effects) = 1 RE I Flammability = 1 Flammability = 1	
REACTIVITY I Physical Házard = 1 Other hazards	
Results of PBT and vPvB assessment PBT: Not applicable.	
vPvB: Not applicable.	
3 Composition/information on ingredients Chemical characterization: Substances	
CAS# Description: 58577-95-0 (R)-2-Amino-3-benzyloxy-1-propanolhydrochloride	
4 First-aid measures	
Description of first aid measures	
After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.	
After skin contact Immediately wash with water and soap and rinse thoroughly.	
After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.	
After swallowing Seek medical treatment.	(Contd. on page 2)
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Information for doctor

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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. (Contd. of page 1)

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 Nitrogen oxides (NOx) Hydrogen chloride (HCl) Possibly Hydrogen cyanide (HCN) 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 Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: 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: Not required. Additional information: No data Exposure controls 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. Avoid contact with the aves and exin. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. **Breathing equipment:** Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves 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 chemical properties General Information Appearance: Form: Solid Color: White Not determined Odor: Odor threshold: Not determined. Not applicable. pH-value: Change in condition Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Not determined Not determined Not determined Not determined. Not determined Not determined (Contd. on page 3)

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		(Contd. of page 2)	
Auto igniting:	Not determined.		
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.		
Lower: Upper:	Not determined Not determined		
Vapor pressure:	Not applicable.		
Density: Relative density	Not determined Not determined.		
Vapor density	Not applicable.		
Evaporation rate Solubility in / Miscibility with	Not applicable.		
Water: Partition coefficient (n-octanol/water)	Not determined Not determined.		
Viscosity: dynamic:	Not applicable.		
kinematic:	Not applicable.		
Other information	No further relevant information available.		
10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions No dangerous reactions known Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides Hydrogen chloride (HCI) Possibly Hydrogen cyanide (HCN)			
11 Toxicological information Information on toxicological effects Acute toxicity: No effects known. LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: Causes skin irritation. Eye irritation or corrosion: Causes serious eye irritation. Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No effects known. Carcinogenicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: May cause respiratory irritation. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. 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 information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.			
13 Disposal considerations			
Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.			
14 Transport information Not a hazardous material for transportat	ion.		
UN-Number DOT, IMDG, IATA	None		
UN proper shipping name DOT, IMDG, IATA	None		
Transport hazard class(es) DOT, ADR, IMDG, IATA			
DOT, ADR, IMDG, IATA Class	None		
Packing group DOT, IMDG, IATA	None		
DOT, IMDG, IATA Environmental hazards:	None Not applicable.		
Special precautions for user	Not applicable. Not applicable.		
		(Contd. on page 4)	
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Product name: (R)-2-Amino-3-benzyloxy-1-propanolhydrochloride			
	(Contd. of page 3)		
Transport in bulk according to Annex II of MARPOL73/78 a	and the IBC Code Not applicable.		
Transport/Additional information:	Not dangerous according to the above specifications.		
DOT Marine Pollutant (DOT):	No		
15 Regulatory information			
Safety, health and environmental regulations/legislation s GHS label elements The product is classified and labeled in a Hazard pictograms	pecific for the substance or mixture accordance with 29 CFR 1910 (OSHA HCS)		
GHS07			
P405 Store locked up. P501 Dispose of contents/container in accordance National regulations This product is not listed in the U.S. Environmental Protection to research and development only. This product must be used product must not be used for commercial purposes or in formul SARA Section 313 (specific toxic chemical listings) Substa California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is no Prop 65 - Developmental toxicity, substance is not listed. Prop 65 - Developmental toxicity, male Substance is not list Information about limitation of use: For use only by technical Other regulations.	eve protection/face protection. r several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. nd keep comfortable for breathing. se with local/regional/national/international regulations. Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted by or directly under the supervision of a technically qualified individual as defined by TSCA. This lations for commercial purposes. Ince is not listed. ed. ally qualified individuals. REACH Regulations (EC) No. 1907/2006. Substance is not listed. AREACH Regulations (EC) No. 1907/2006. Substance is not listed. Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the		
information to ensure proper use and protect the health and sa conformance with this Material Safety Data Sheet, or in combine	o other information gathered by them, and should make independent judgement of suitability of this afety of employees. This information is furnished without warranty, and any use of the product not in nation with any other product or process, is the responsibility of the user.		
Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: RID: Rejdement international concernant le transport des marchandises dangereus IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Asso ICAO-TI: Technical Instructions by the "International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (IC IMDG: International Admittime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Admittine Code for Dangerous Goods DOT: US Department of Transportation CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal concenterence of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer	ses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) sciation" (IATA) CAO)		

IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

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