

Safety Data Sheet per OSHA HazCom 2012

1	Identification
	Product identifier
	Product name: <u>(R)-1-(2-Chlorophenyl)ethanol</u> Stock number: H60061
	CAS Number: 120466-66-2
	IZU400-00-2 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. 30 Bond Street
	Ward Hill, MA 01835-8099 Tel: 800-343-0660
	Fax: 800-322-4757 Email: tech@alfa.com
	India 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.
	Hazard(s) identification Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)
	The substance is not classified according to the Globally Harmonized System (GHS). Hazards not otherwise classified No information known.
	Label elements
	GHS label elements Not applicable Hazard pictograms Not applicable
	Signal word Not applicable Hazard statements Not applicable WHWIS classification Not applicable
	WHMIS classification Not controlled Classification system
	HMIS ratings (scale 0-4) (Hazardous Materials Identification System)
	HEALTH I Health (acute effects) = 1 FIRE I Flammability = 1
	REACTIVITY 1. Physical Hazard = 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:
	120466-66-2 (R)-1-(2-Chlorophenyl)ethanol
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.
	Seek immédiate 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.
	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 monovide and carbon diovide
	Hydrogen chloride (HCl) Advice for firefighters
	Hydrogen chloride (HCl) Advice for firefighters Protective equipment: Wear self-contained respirator.
	Wear fully protective impervious suit.
	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: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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. (Contd. on page 2)

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See Section 13 for disposal information.

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7 Handling and storage					
Handling					
Precautions for safe handling					
Keep container tightly sealed. Store in cool, dry place in tightly closed	containers.				
Information about protection against explosions and fires: No information known.					
Conditions for safe storage, includin	g any incompatibilities				
Storage Requirements to be met by storeroop	ms and receptacles: No special requirements.				
Information about storage in one cor	nmon storage facility: Store away from oxidizing agents.				
Further information about storage co	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 mea The usual precautionary measures for I	handling chemicals should be followed.				
Keep away from foodsfuffs, beverages	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 e	end of work.				
Maintain an ergonomically appropriate	working environment.				
Protection of hands:	spirator when high concentrations are present.				
Impervious aloves					
The selection of suitable aloves not onl	se for their proper condition. y depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.				
Penetration time of glove material (in	n minutes) Not determined				
Eye protection: Safety glasses Body protection: Protective work cloth	nina.				
9 Physical and chemical propertie					
Information on basic physical and chemical properties					
General Information Appearance: Form: Liquid					
	Liquid				
Odor: Odor threshold:	Not determined Not determined.				
pH-value:	Not determined.				
Change in condition					
Melting point/Melting range: Boiling point/Boiling range:	Not determined Not determined				
Sublimation temperature / start:	Not determined				
Flammability (solid. gaseous)	Not determined.				
Ignition temperature: Decomposition temperature:	Not determined Not determined				
Auto igniting:	Not determined.				
Danger of explosion: Explosion limits:	Not determined.				
Lower:	Not determined				
Upper:	Not determined				
Vapor pressure: Density:	Not determined Not determined				
Relative density	Not determined.				
Vapor density Evaporation rate	Not determined. Not determined.				
Solubility in / Miscibility with					
Water: Not determined Partition coefficient (n-octanol/water): Not determined.					
Viscosity:					
dynamic: kinematic:	Not determined. Not determined.				
Other information	Not determined. 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 nazardolis reactions R	eacts with strong oxidizing adents				
Conditions to avoid No further relevan	nt information available.				
Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products:					
Carbon monoxide and carbon dioxide					

Carbon monoxide and carbon dioxide Hydrogen chloride (HCl)

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Product name: (R)-1-(2-Chlorophenyl)ethanol

Product name: (R)-1-(Z-Chlorophenyl)ethanol				
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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: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this mater Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acute	n.			
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 material to be released to the environment without proper governmental permits. Do not allow modiluted 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 Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.	disposal.			
14 Transport information				
UN-Number DOT, ADN, IMDG, IATA	Not applicable			
UN proper shipping name DOT, ADN, IMDG, IATA	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	Not applicable.			
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code				
Transport/Additional information:				
DOT Marine Pollutant (DOT):	No			
Marine Pollutant (DOT): UN "Model Regulation":	<u>-</u>			
UN "Model Regulation":				
15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements Not applicable Hazard Not applicable Hazard Statements Not applicable Mational regulations This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes. This product is not listed on the Canadian Domestic Substance Is (NDSL). SARA Section 313 (specific toxic chemical listings) Substance is not listed. Prop 65 - Developmental toxicity, substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity, the Substance is not listed. Prop 65 - Developmental toxicity applicable Substance is not listed. Prop 65 - Developme				
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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 this 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 not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the use Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and accoryms: 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 Transportation CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal concentration, 50 percent LD50: Lethal concentration of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) MTP: National Toxicology Program (USA) MARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

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