

Safety Data Sheet per OSHA HazCom 2012

1 Identification Product identifier Product name: 1-(4-Chlorophenyl)ethanol Stock number: L05038 **CAS Number:** 3391-10-4 EC number: 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 Details of the supplier of the safety da 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 www.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) Set. GHS06 Skull and crossbones Acute Tox. 3 H301 Toxic 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 GHS06 Signal word Danger Hazard statements H301 Toxic if swallowed. H301 Toxic it swaiiowed. Precautionary statements P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/... P321 Specific treatment (see on this label). P405 Store locked up. Dispose of contents/container in accordance with local/regional/nat Dispose of contents/container in accordance with local/regional/national/international regulations.
 WHMIS classification D1B - Toxic material causing immediate and serious toxic effects S. Classification system (Hazardous Materials Identification System) 1
 Health (acute effects) = 1

 RE
 Flammability = 1

 ACTIVITY 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: 1-10-4 1-(4-Chlorophenyl)ethanol Identification number(s): EC number: 222-223-4 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 immediate medical advice. 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)

Product name: 1-(4-Chlorophenyl)et	thanol	
		(Contd. of page 1)
Information for doctor Most important symptoms and effects	s, both acute and delayed No further relevant information available.	, , , , , ,
Indication of any immediate medical a	attention and special treatment needed No further relevant information available.	
5 Fire-fighting measures		
Extinguishing media Suitable extinguishing agents Carbon	n dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.	
Special hazards arising from the subs If this product is involved in a fire, the fol	stance or mixture illowing can be released:	
Carbon monoxide and carbon dioxide Hydrogen chloride (HCl)		
Advice for firefighters Protective equipment: Wear self-contained respirator.		
Wear self-contained respirator. Wear fully protective impervious suit.		
6 Accidental release measures		
Personal precautions, protective equip Wear protective equipment. Keep unprot	ipment and emergency procedures steeted persons away	
Ensure adequate ventilation	llow material to be released to the environment without proper governmental permits.	
Absorb with liquid-binding material (sand	nt and cleaning up: d, diatomite, acid binders, universal binders, sawdust).	
Dispose of contaminated material as wa Prevention of secondary hazards: No Reference to other sections	aste according to section 13.	
See Section 7 for information on safe ha	andling	
See Section 8 for information on persona See Section 13 for disposal information.	nal protection equipment.	
7 Handling and storage		
Handling		
Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed of	containara	
Store in cool, dry place in tightly closed of Ensure good ventilation at the workplace	Containers. e. 	
Conditions for safe storage, including	r explosions and fires: No information known. g any incompatibilities	
Storage Requirements to be met by storeroom	ns and receptacles: No special requirements.	
Information about storage in one com Further information about storage co	nmon storage facility: Store away from oxidizing agents.	
Keep container tightly sealed. Store in cool, dry conditions in well seale	led containers.	
Specific end use(s) No further relevant	t information available.	
8 Exposure controls/personal prote		
	of technical systems: I designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.	
Control parameters Components with limit values that req	quire monitoring at the workplace: Not required.	
Additional information: No data		
Personal protective equipment General protective and hygienic meas		
The usual protective and nyglenic measures The usual precautionary measures for ha Keep away from foodstuffs, beverages a Remove all soiled and contaminated close	andling chemicals should be followed.	
Remove all soiled and contaminated closed wash hands before breaks and at the er	ind reed. phing immediately. phing immediately.	
Maintain an ergonomically appropriate w	working environment. spirator when high concentrations are present.	
Protection of hands: Impervious gloves		
Check protective gloves prior to each us The selection of suitable gloves not only	y depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.	
Penetration time of glove material (in Eye protection: Safety glasses Body protection: Protective work clothi	minutes) Not determined	
Body protection: Protective work clothi	ing.	
9 Physical and chemical properties		
Information on basic physical and che General Information	emical properties	
Appearance: Form:	Liquid	
Color: Odor: Oder threshold:	Colorless Not determined	
Odor threshold: pH-value:	Not determined. Not determined.	
Change in condition Melting point/Melting range:	Not determined	
Boiling point/Boiling range: Sublimation temperature / start:	80-82 °C (176-180 °F) (1 mmHg) Not determined	
Flash point:	> 110 °C (> 230 °F)	
Flammability (solid, gaseous) Ignition temperature:	Not determined.	
Decomposition temperature:	Not determined	(Contd. on page 3)
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Product name: 1-(4-Chlorophenvl)ethanol

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		viewed on 02/05/2009
Product name: 1-(4-Chlorophenyl)e	ethanol	
		(Contd. of page 2)
Auto igniting:	Not determined.	
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.	
Lower:	Not determined	
Upper: Vapor pressure:	Not determined Not determined	
Density at 20 °C (68 °F): Relative density	1.17 g/cm³ (9.764 lbs/gal) Not determined.	
Vapor density	Not determined.	
Evaporation rate Solubility in / Miscibility with	Not determined.	
Water:	Not determined	
Partition coefficient (n-octanol/water Viscosity:	r): Not determined.	
dynamic:	Not determined.	
kinematic: Other information	Not determined. No further relevant information available.	
0 Stability and reactivity		
Reactivity No information known.		
Chemical stability Stable under recon	nmended storage conditions. to be avoided: Decomposition will not occur if used and stored according to specifications.	
Possibility of hazardous reactions N	lo dangerous reactions known	
Conditions to avoid No further releval	Int information available.	
Incompatible materials: Oxidizing age Hazardous decomposition products. Carbon monoxide and carbon dioxide		
Carbon monoxide and carbon dioxide Hydrogen chloride (HCl)		
1 Toxicological information		
Information on toxicological effects		
Acute toxicity: Harmful if swallowed.		
LD/LC50 values that are relevant for Skin irritation or corrosion: May cause		
Eye irritation or corrosion: May caus Sensitization: No sensitizing effects ki	se irritation	
Germ cell mutagenicity: No effects ki	nown. nown.	
Carcinogenicity: No classification data	ta on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Reproductive toxicity: No effects kno Specific target organ system toxicity	wn. y - repeated exposure: No effects known.	
Specific target organ system toxicity Aspiration hazard: No effects known.	y - single exposure: No effects known.	
Subacute to chronic toxicity: No effe	ects known.	
Additional toxicological information	: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.	
2 Ecological information		
Toxicity	nformation available	
Persistence and degradability No fur	rther relevant information available.	
Aquatic toxicity: No further relevant in Persistence and degradability No fur Bioaccumulative potential No further Mobility in soil No further relevant info	r relevant information available. ormation available	
Additional ecological information:		
General notes:	the environment without proper governmental permits.	
Do not allow undiluted product or large	e quantities to reach ground water, water course or sewage system.	
Avoid transfer into the environment. Results of PBT and vPvB assessme	nt	
PBT: Not applicable.		
vPvB: Not applicable. Other adverse effects No further relev	vant information available.	
3 Disposal considerations		
Waste treatment methods		
Recommendation Consult state, local	l or national regulations to ensure proper disposal.	
Uncleaned packagings: Recommendation: Disposal must be r	made according to official regulations.	
4 Transport information		
Not a hazardous material for transporta	ation.	
UN-Number DOT, IMDG, IATA	None	
UN proper shipping name DOT, IMDG, IATA	None	
Transport hazard class(es)	NUNC	
DOT, ADR, IMDG, IATA		
Class	None	
Packing group DOT, IMDG, IATA	None	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
	ex II of MARPOL73/78 and the IBC Code Not applicable.	
Transport/Additional information:	Not dangerous according to the above specifications.	Contra an and 1
		(Contd. on page 4

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DOT Marine Pollutant (DOT):	No
Regulatory information Safety, health and environmental regulations/le GHS label elements The product is classified and Hazard pictograms	egislation specific for the substance or mixture I labeled in accordance with 29 CFR 1910 (OSHA HCS)
National regulations	ordance with local/regional/national/international regulations.
All components of this product are listed in the U.S. All components of this product are listed on the Car SARA Section 313 (specific toxic chemical listin California Proposition 65 Prop 65 - Chemicals known to cause cancer Sul Prop 65 - Developmental toxicity, Substance is no Prop 65 - Developmental toxicity, female Substanc Prop 65 - Developmental toxicity, male Substanc Information about limitations and prohibitive re	ubstance is not listed. not listed. ance is not listed. nce is not listed. y by technically qualified individuals. egulations rding to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. ricle 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on t g Authorisation for use) Substance is not listed.
information to ensure proper use and protect the he	upplement to other information gathered by them, and should make independent judgement of suitability of this nealth and safety of employees. This information is furnished without warranty, and any use of the product not i , or in combination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Depar Date of preparation / last revision 11/23/2015 / - Abbreviations and acronyms: RID: Règlement international concernant le transport des marchand IATA-DGR: Dangerous Goods Regulations by the "International Air ICAO: International Civil Aviation Organization ICAO: TI: Technical Instructions by the "International Civil Aviation C MDG: International Air Transportation IATA: International Air Transportation ENINCS: European Inventory of Existing Commercial Chemical Sub DOT: US Department of Transportation ENINCS: European Inventory of Existing Commercial Chemical Sub CAS: Chemical Abstracts Service (division of the American Chemical HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Cana LCSO: Lethal concentration, 50 percent UPB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienist: OSHA: Occupational Safety and Health Administration (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	- ndises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ir Transport Association" (IATA) Organization" (ICAO) Ibstances cal Society) nada)