



	entification	
	nduct identifier nduct name: 2-(p-Toluenesulfonyl)ethanol	
	ck number: L19365	
CAS	S Number: 381-54-0	
Rele	evant identified uses of the substance or mixture and uses advised against. ntified use: SU24 Scientific research and development	
Deta	ails of the supplier of the safety data sheet	
Alfa	nufacturer/Supplier:	
Ther 30 B	ermo Fisher Scientific Chemicals, Inc. Bond Street	
Tel: a	rd Hill, MA 01835-8099 : 800-343-0660	
Ema	:: 800-322-4757 ail: tech@alfa.com	
Infor	w.alfa.com ormation Department: Health, Safety and Environmental Department	
Eme Durir	ergency telephone number: ing normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-07	789.
2 Haz	zard(s) identification	
Clas	ssification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) substance is not classified according to the Globally Harmonized System (GHS).	
Haza	zards not otherwise classified No information known.	
GHS	pel elements S label elements Not applicable	
Haza Sign	zard pictograms Not applicable nal word Not applicable	
Haza	and statements Not applicable IMIS classification Not controlled	
Clas HMIS	ssification system IS ratings (scale 0-4)	
(Haz	zardous Materials Identification System)	
FIRE	Health (acute effects) = 1 Flammability = 1	
-	anner hazards	
Resi	sults of PBT and vPvB assessment	
vPvE	T: Not applicable. /B: Not applicable.	
	mposition/information on ingredients	
Chei CAS	- emical characterization: Substances S# Description:	
Cher CAS 2238	emical characterization: Substances S# Description: 181-54-0 2-(p-Toluenesulfonyl)ethanol	
Cher CAS 2238 4 Firs	emical characterization: Substances S# Description: 81-54-0 2-(p-Toluenesulfonyl)ethanol st-aid measures	
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Chee CAS 2238 4 Firs Dess After Supp Seek After Indic Sup Sup After After Indic 5 Fire Extin Suif Suff After Indic 5 Fire Extin Suff Advi Prot Wea Ensu Envi Mea Ensu Envi Mea Ensu Envi Mea Ensu Envi Mea Ensu Envi Mea Ensu Envi Mea Ensu Envi Mea Ensu Envi Mea Ensu Envi Mea Ensu Envi Mea Envi Envi Envi Envi Envi Envi Envi Envi	anical characterization: Substances Sit 2-54-0 2 (p-Toluenesulfonyl)ethanol st-aid measures scription of first aid measures erinhalation pby fresh air. If required, provide artificial respiration. Keep patient warm. sk immediate medical advice. er skin contact nediately wash with water and soap and rinse thoroughly. sk immediate medical advice. er skin contact register decide advice. er skin contact register decide advice. er skin contact register decide advice. er swallowing Seek medical treatment. symptoms and effects, both acute and delayed No further relevant information available. ication of any immediate medical attention and special freatment needed No further relevant information available. ication of any immediate medical attention and special freatment needed No further relevant information available. ication of any immediate medical attention and special freatment needed No further relevant information available. ication of any immediate medical attention and special freatment provide No further relevant information available. ication of any immediate medical attention and special freatment provide No further relevant information available. ication of any immediate medical attention and special freatment provide No further relevant information available. ication of any immediate medical attention and special freatment provide No further relevant information available. ication dead carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. sis product is involved in a fire, the following can be released: bon monoxide and carbon dioxide fue corticifythers is product is involved in a fire, the following can be released: bon monoxide inde respirator. ar tuly protective equipment and emergency procedures ar protective equipment. Keep unprotected persons away. were adequade ventilation riommental precautions, protective equipment and chearing up. Pick up mechanically. vention of secondary hazards: No special measure	(Contd. on page 2)

Product name: 2-(p-Toluenesulfonyl)ethanol

See Section 13 for disposal information.		(Contd. of page 1)			
Conditions for safe storage, including Storage Requirements to be met by storeroom	explosions and fires: No information known. any incompatibilities s and receptacles: No special requirements. mon storage facility: Store away from oxidizing agents. aditions: d containers.				
Specific end users) No future 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 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 solled 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 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. Eye protective: Passes Body protective work clothing.					
9 Physical and chemical properties					
Information on basic physical and che General Information Appearance: Form: Odor:					
	Not applicable.				
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	54-58 °C (129-136 °F) Not determined Not determined				
Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	Not applicable Not determined. Not determined Not determined Not determined.				
Explosion limits: Lower: Upper: Vapor pressure: Density: Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Viscosity: dynamic: kinematic:	Product does not present an explosion hazard. Not determined Not applicable. Not determined. Not determined. Not applicable. Not determined. Not determined. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.				

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 Sulfur oxides (SOx)

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> USA (Contd. on page 3)

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Product name: 2-(p-Toluenesulfonyl)ethanol

Product name: 2-(p-Toluenesulfonyl)ethanol				
		Contd. of page 2)		
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 ma 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. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acut 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:	wn.			
General notes: Do not allow material to be released to the environment without proper govern Do not allow undiluted product or large quantities to reach ground water, water 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.	nmental permits. er course or sewage system.			
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 transportation.				
UN-Number DOT, IMDG, IATA	None			
UN proper shipping name DOT, IMDG, IATA	None			
Transport hazard class(es) DOT, ADR, IMDG, IATA Class	None			
Packing group DOT, IMDG, IATA	None			
Environmental hazards:	Not applicable.			
Special precautions for user	Not applicable.			
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Co				
Transport/Additional information: DOT	Not dangerous according to the above specifications.			
Marine Pollutant (DOT):	No			
15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable Hazard statements Not applicable Hazard statements Not applicable Mational regulations All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory. 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, male Substance is not listed. Prop 65 - Developmental toxicity, the regulations Substance of Very High Concern (SVHC) 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 1907/2				
Chemical safety assessment: A Chemical Safety Assessment has not been	carried out.	USA -		

Product name: 2-(p-Toluenesulfonyl)ethanol

(Contd. of page 3)

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 con Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / -Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Maritime Code for Dangerous Goods DOT: US Department of Transportation CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal dose, 50 percent LD50: Lethal dose, 50 percent US0: 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