

Safety Data Sheet per OSHA HazCom 2012

-	Identification
	Product identifier Product name: (R)-(-)-2-Hydroxy-2-phenylethyl p-toluenesulfonate
	Stock number: L13869
	CAS Number: 40434-87-5
	EC number: 254-918-3
	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
	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)
	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 nictograms Not applicable
	Signal word Not applicable Hazard statements 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 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:
	40434-87-5 (Ř)-(-)-2-Hydroxy-2-phenylethyl p-toluenesulfonate Identification number(s):
	EC number: 254-918-3
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 médical 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 monoxide and carbon dioxide
	Sulfur oxides (SOx) 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: Pick up mechanically.
	(Contd. on page 2) USA

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Product name:	(R)-(-)-2-Hyd	lroxy-2-phenyleth	yl p-toluenesulfonate
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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.

(Contd. of page 1)

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, 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 in one 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

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

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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.

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9 Physical and chemical properties						
Information on basic physical and ch General Information Appearance:	emical properties					
Form:	Powder					
Color:	White					
Odor: Odor threshold:	Not determined Not determined.					
pH-value:	Not applicable.					
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	74-81 °C (165-178 °F) Not determined Not determined					
Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	Not applicable Not determined. Not determined Not determined Not determined.					
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.					
Lower:	Not determined					
Upper:	Not determined					
Vapor pressure:	Not applicable.					
Density:	Not determined					
Relative density Vapor density	Not determined.					
Evaporation rate	Not applicable. Not applicable.					
Solubility in / Miscibility with						
Water:	Insoluble					
Partition coefficient (n-octanol/water)	: Not determined.					
Viscosity:						
dynamic:	Not applicable					
kinematic: Other information	Not applicable. 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.

Product name: (R)-(-)-2-Hydroxy-2-phenylethyl p-toluenesulfonate

Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide Sulfur oxides (SOx) (Contd. of page 2)

11 Toricological information inscription of the section in the section of the sec	Sulfur oxides (SOx)						
LDL 259 values that are relevant for classification: No class See Institution: No sensitivity of classification: No denses See Institution: See Institution: See Institution: No denses See Institution: See Instit	Information on toxicological effects						
She Intration or correspondent. May cause intelligion Second Status Status in Second Status Sta	Acute toxicity: No effects known. LD/LC50 values that are relevant for classification: No data						
Sensitization: No sensitizing offices known. Generalization: No sensitizing offices known. Sensitization: No sensitized basis of an analysis properties of this material is available from the EPA, IARC, NTP, OSHA or ACGH. Reproductive forking: No effects known. Separation facater, Ro eff	Skin irritation or corrosion: May cause irritation						
Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA_IARC, NTP. OSHA or ACGH. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Modelinal toxicological Information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Exclusion of the substance of the substance is not fully known. Exclusion of the substance is not fully known. Exclusi	Sensitization: No sensitizing effects known.						
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Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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 or use user.
Department issuing SDS: Global Marketing Department
Date of preparation / last revision 11/24/2015 / Abbreviations and acronyms:
RID: Reglement 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: The 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 Civil Aviation Organization"
ICAO: The Technical Instructions by the "International Civil Aviation Organization"
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ICAO: The Technical Instructions by the "International Civil Aviation Organization
ICAO: The Technical Instructions of the American Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Substances
CAS: Chemical Abstracts Service (avision of the American Chemical Society)
HMIS: Hazardous Materials Information System (CAn)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
UD50: Lethal concentration, 50 percent
UD50: Content and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygi

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USA