

Safety Data Sheet per OSHA HazCom 2012

1 Identification

### Product identifier Product name: Di-p-toluoyl-D-tartaric acid

Stock number: L13223 CAS Number: 32634-68-7 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 Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. Inerrito Fisher Scheman C. 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.

I abel elements GHS label elements Not applicable Hazard pictograms 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 (acute effects) = 1 Flammability = 1 Flammability = 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: 32634-68-7 Di-p-toluoyl-D-tartaric acid Identification number(s): EC number: 251-132-2

### 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. 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.

# 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 dióxide 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: Pick up mechanically. Prevention of secondary hazards: No special measures required.

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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. 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

Personal protective equipment

The usual 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 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

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Information on basic physical and che General Information Appearance: Form: Color: Odor: Odor: Odor threshold:	emical properties Powder White Not determined Not determined.
pH-value:	Not applicable.
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	169-171 °C (336-340 °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: Lower: Upper: Vapor pressure: Density: Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Viscosity: dynamic: kinematic: Other information	Product does not present an explosion hazard. Not determined Not determined Not applicable. Not determined. Not applicable. Insoluble 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. **Conditions to avoid** No further relevant information available. **Incompatible materials:** Oxidizing agents

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Product name: Di-p-toluoyl-D-tartaric acid			
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Hazardous decomposition products: Carbon monoxide and carbon dioxide			
<ul> <li>11 Toxicological information</li> <li>Information on toxicological effects <ul> <li>Acute toxicity: No effects known.</li> <li>LD/LC50 values that are relevant for classification: No data</li> <li>Skin irritation or corrosion: May cause irritation</li> <li>Eye irritation or corrosion: May cause irritation</li> <li>Sensitization: No sensitizing effects known.</li> <li>Germ cell mutagenicity: No effects known.</li> <li>Carcinogenicity: No classification data on carcinogenic properties of this mat</li> <li>Reproductive toxicity: No effects known.</li> <li>Specific target organ system toxicity - single exposure: No effects known.</li> <li>Aspiration hazard: No effects known.</li> <li>Subacute to chronic toxicity: No effects known.</li> <li>Subacute to chronic toxicity: No effects known.</li> </ul> </li> </ul>	vn.		
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. 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 prope Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.	r disposal.		
<b>14 Transport information</b> 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:	Not dangerous according to the above specifications.		
DOT Marine Pollutant (DOT):	No		
15 Regulatory information			
Safety, health and environmental regulations/legislation specific for the s GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable National regulations All components of this product are listed in the U.S. Environmental Protection. All components of this product are listed on the Canadian Non-Domestic Subs 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, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Information about limitation of use: For use only by technically qualified ind Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regula The conditions of restrictions according to Article 67 and Annex XVII of t market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Su	Agency Toxic Substances Control Act Chemical substance Inventor tances List (NDSL). ! ividuals. ations (EC) No. 1907/2006. Substance is not listed. he Regulation (EC) No 1907/2006 (REACH) for the manufacturin		
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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 con Department issuing SDS: Global Marketing Department Date of preparation / last revision 1/24/2015 / -Abbreviations and acronyms: IMD6: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances 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 dose, 60 percent VPWs very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) MTP: National Toxicology Program (USA) ARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

USA