

Safety Data Sheet per OSHA HazCom 2012

Seek immediate medical advice.

1 Identification Product identifier Product name: 1,7-Dihydroxynaphthalene Stock number: H28261 CAS Number: 575-38-2 EC number: 209-383-0 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: 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: Call Carechem 24 at +44 (0) 1865 407333 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) ! GHS07 Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation. 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 ! GHS07 Signal word Warning Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation H335 May cause respiratory irritation. Precautionary statements 

 Precautionary statements

 P261
 Avoid breathing dust/fume/gas/mist/vapours/spray.

 P280
 Wear protective gloves/protective clothing/eye protection/face protection.

 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

 P304+P340
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

 P405
 Store locked up.

 P501
 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification D2B - Toxic material causing other toxic effects Т Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) 
 Health
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 Health
 (acute effects) = 1

 RECTIVITY
 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: 575-38-2 1,7-Dihydroxynaphthalene Identification number(s): EC number: 209-383-0 4 First-aid measures Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm.

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# Product name: 1,7-Dihydroxynaphthalene

After skin contact

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 Mect important symptoms and effects, both acute and delayed No further relevant information ave

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 dioxide 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: Ensure adequate ventilation. 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.

### 7 Handling and storage

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Conditions for safe storage, including Storage Requirements to be met by storeroon	explosions and fires: No information known. g any incompatibilities ns and receptacles: No special requirements. nmon storage facility: Store away from oxidizing agents. anditions:	
8 Exposure controls/personal prote	ection	
Additional information about design of Properly operating chemical fume hood	of technical systems: designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.	
Control parameters	quire monitoring at the workplace: Not required.	
Protection of hands: Impervious gloves Check protective gloves prior to each us	nandling chemicals should be followed. and feed. working environment. spirator when high concentrations are present. se for their proper condition. y depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. minutes) Not determined	
9 Physical and chemical properties		
Information on basic physical and ch General Information Appearance: Form: Odor: Odor threshold:	Solid Not determined Not determined.	
pH-value:	Not applicable.	
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	180-184 °C (356-363 °F) Not determined Not determined	
Flash point: Flammability (solid, gaseous)	Not applicable Not determined.	
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# Product name: 1,7-Dihydroxynaphthalene

Product name: 1,7-Dihydroxynapht	nalene		
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Ignition temperature: Decomposition temperature:	Not determined		
Auto igniting:	Not determined Not determined.		
Danger of explosion:	Product does not present an explosion hazard.		
Explosion limits:			
Lower: Upper:	Not determined Not determined		
Vapor pressure:	Not applicable.		
Density: Relative density	Not determined Not determined.		
Vapor density	Not determined. Not applicable.		
Evaporation rate	Not applicable.		
Solubility in / Miscibility with Water:	Not determined		
Partition coefficient (n-octanol/water)	: Not determined.		
Viscosity: dynamic:	Not applicable.		
kinematic:	Not applicable.		
Other information	No further relevant information available.		
10 Stability and reactivity			
Reactivity No information known.			
Chemical stability Stable under recom	mended storage conditions. t <b>o be avoided:</b> Decomposition will not occur if used and stored according to specifications.		
Possibility of hazardous reactions No	o be avoided. Decomposition without occur if used and stored according to specifications.		
Conditions to avoid No further relevan	t information available.		
Incompatible materials: Oxidizing age Hazardous decomposition products:	ns Carbon monoxide and carbon dioxide		
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11 Toxicological information			
Information on toxicological effects			
Acute toxicity: No effects known. LD/LC50 values that are relevant for o	classification: No data		
Skin irritation or corrosion: Causes sl	kin irritation.		
Eye irritation or corrosion: Causes se Sensitization: No sensitizing effects kn			
Germ cell mutagenicity: No effects kn	own.		
Carcinogenicity: No classification data	on carcinodenic properties of this material is available from the EPA. IARC. INTP. USHA or ACGIH.		
Reproductive foxicity: No effects know Specific target organ system toxicity	- repeated exposure: No effects known.		
Specific target organ system toxicity	- single exposure: May cause respiratory irritation.		
Aspiration hazard: No effects known. Subacute to chronic toxicity: No effect	ts known		
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.		
12 Ecological information			
Toxicity			
Aquatic toxicity: No further relevant int	iormation available.		
Persistence and degradability No furt	her relevant information available		
Bioaccumulative potential No further i Mobility in soil No further relevant info	mation available.		
Additional ecological information:			
General notes: Do not allow material to be released to t	he environment without proper governmental permits.		
Do not allow undiluted product or large	quantities to reach ground water, water course or sewage system.		
Avoid transfer into the environment. Results of PBT and vPvB assessmen	f		
PBT: Not applicable.			
vPvB: Not applicable. Other adverse effects No further releva	ant information available		
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13 Disposal considerations			
Waste treatment methods			
Recommendation Consult state, local of Uncleaned packagings:	Recommendation Consult state, local or national regulations to ensure proper disposal.		
Recommendation: Disposal must be m	ade according to official regulations.		
14 Transport information			
Not a hazardous material for transportat	ion.		
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 Code Not applicable.			
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		- USA -	

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Product name: 1,7-Dihydroxynaphthalene		
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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 to GHS label elements. The product is classified and labeled in accordar Hazard pictograms	for the substance or mixture nce with 29 CFR 1910 (OSHA HCS)	
P304+P340    IF INHALED: Remove person to fresh air and keep      P405    Store locked up.      P501    Dispose of contents/container in accordance with lo      National regulations    All components of this product are listed in the U.S. Environmental Pro      All components of this product are listed on the Canadian Domestic St      SARA Section 313 (specific toxic chemical listings) Substance is n      California Proposition 65      Prop 65 - Chemicals known to cause cancer      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, male Substance is not listed.      Prop 65 - Developmental toxicity, male Substance is not listed.      Prop 65 - Developmental toxicity, male Substance is not listed.      Information about limitation of use: For use only by technically qual      Other regulations, limitations and prohibitive regulations	tection/face protection. al minutes. Remove contact lenses, if present and easy to do. Continue rinsing. o comfortable for breathing. local/regional/national/international regulations. rotection Agency Toxic Substances Control Act Chemical substance Inventory. Substances List (DSL). not listed. d. lified individuals. H Regulations (EC) No. 1907/2006. Substance is not listed. XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the	
<b>16 Other information</b> Employers should use this information only as a supplement to other in information to ensure proper use and protect the health and safety of e conformance with this Material Safety Data Sheet, or in combination w	information gathered by them, and should make independent judgement of suitability of this employees. This information is furnished without warranty, and any use of the product not in with any other product or process, is the responsibility of the user.	
Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/23/2015 / - Abbreviations and acronyms: RID: Reglement international concernant le transport des marchandises dangereuses par che IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (I/ ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (I/CAO) IMDG: 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 concentration of organe 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)	nemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) (ATA) 	