



Page 1/4 Printing date 10/17/2017 Revision date 10/16/2017 Version 1

	Version 1
1 Identification	
Product identifier	
Product name: <u>1-Chlorophthalazine</u> Stock number: H27143	
CAS Number: h2/143 CAS Number: 5784-45-2	
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) 928-0	789.
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.	
STOT SE 3 H335 May cause respiratory irritation. Hazards not otherwise classified No information known. Label elements	
Label elements GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms	
\wedge	
GHS07	
Signal word Warning	
Hazard statements H315 Causes skin irritation.	
H319 Causes serious eye irritation. H335 May cause respiratory irritation.	
Precautionary statements P261 Avoid breathing dust/fume/gas/mist/vapors/sprav	
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	
$\widehat{\mathbf{T}}$	
Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	
HEALTH I Health (acute effects) = 1	
FIRE IF Jammability = 1 REACTIVITY 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:	
5784-45-2 1-Chlorophthalazine Concentration: ≤100%	
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.	(Contd. on page 2)
	USA

(Contd. of page 1)

Product name: 1-Chlorophthalazine

After swallowing Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed Causes skin irritation. Causes serious eye irritation. 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: It this product is involved in a fire, the i Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Hydrogen chloride (HCI) **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 product to reach sewage system or any water course. 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. Protective Action Criteria for Chemicals PAC-1: Substance is not listed PAC-1: Substance is not listed. PAC-2: Substance is not listed. PAC-3: Substance is not listed.

7 Handling and storage

Handling Precautions for safe handling Handle under dry protective gas. Keep container tightly sealed. Ensure good ventilation at the workplace. 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: Refrigerate Information about storage in one common storage facility: Protect from heat. Store away from water/moisture. Store away from oxidizing agents. Further information about storage conditions: 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

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 soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Recommended filter device for short term use: Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards. Protection of hands: Impervious gloves

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. **Eye protection:** Safety glasses with side shields / NIOSH (US) or EN 166(EU) **Body protection:** Protective work clothing.

USA (Contd. on page 3)

Product name: 1-Chlorophthalazine

(Contd. of page 2)

	(Contd. of page 2)	
9 Physical and chemical propertie	s	
Information on basic physical and cl		
General Information		
Appearance:		
Form:	Powder	
Odor:	Not determined	
Odor threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	109-112 °C (228-234 °F)	
Boiling point/Boiling range:	Not determined	
Sublimation temperature / start: Flammability (solid, gaseous)	Not determined Not determined.	
Ignition temperature:	Not determined	
Decomposition temperature:	Not determined	
Auto igniting:	Not determined.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined	
Upper: Vapor pressure:	Not determined Not applicable.	
Density:	Not determined	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with Water:	Insoluble	
Partition coefficient (n-octanol/water		
Viscosity:	·	
dynamic:	Not applicable.	
kinematic: Other information	Not applicable. No further relevant information available.	
10 Stability and reactivity		
10 Stability and reactivity		
Reactivity No information known.		
Chemical stability Stable under recom	nmended storage conditions. to be avoided: Decomposition will not occur if used and stored according to specifications.	
Possibility of hazardous reactions R	to be avoided. Decomposition will not occur if used and stored according to specifications.	
Conditions to avoid No further releval		
Incompatible materials:		
Oxidizing agents		
Heat		
Water/moisture		
Hazardous decomposition products: Carbon monoxide and carbon dioxide		
Nitrogen oxides		
Hydrogen chloride (HCl)		
44 Terries le visel information		
11 Toxicological information		
Information on toxicological effects		
Acute toxicity: No effects known.		
LD/LC50 values that are relevant for Skin irritation or corrosion: Causes s		
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 material is available from the EPA, IARC, NTP, OSHA or ACGIH.		
Reproductive toxicity: No effects known.		
Specific target organ system toxicity	/ - repeated exposure: No effects known.	
	/ - single exposure: May cause respiratory irritation.	
Aspiration hazard: No effects known.		
Subacute to chronic toxicity: No effe	cts known.	
Additional toxicological information:	cts known. : 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 in	itormation available.	
Persistence and degradability No fur	ther relevant information available.	
Bioaccumulative potential No further Mobility in soil No further relevant info		
Additional ecological information:		
General notes: Avoid transfer into the Results of PBT and vPvB assessment	environment.	
Results of PBT and vPvB assessmer	11	
PDI: NOL applicable. vPvB: Not applicable		
PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relev	vant information available.	
13 Disposal considerations		
Waste treatment methods		
Recommendation Consult state, local	or national regulations to ensure proper disposal.	
Uncleaned packagings: Recommendation: Disposal must be r	made according to official regulations	
Recommendation: Disposal must be r	naue according to onicial regulations.	
	(Contd on page 4)	

Product name: 1-Chlorophthalazine

(Contd. of page 3)

	(Contd. of page 3
14 Transport information	
UN-Number	
DOT, ADN, IMDG, IATA	Not applicable
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not applicable
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable
Packing group DOT, ADR, IMDG, IATA	Not applicable
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 ar	
Transport/Additional information:	
DOT Marino Bollutant (DOT):	.,
Marine Pollutant (DOT): UN "Model Regulation":	No Not applicable
UN "Model Regulation":	Not applicable
P405 Store locked up. P501 Dispose of contents/container in accordance National regulations This product is not listed in the U.S. Environmental Protection A to research and development only. This product must be used b product must not be used for commercial purposes or in formula This product is not listed on the Canadian Domestic Substances	/spray ce protection. everal minutes. Remove contact lenses, if present and easy to do. Continue rinsing. nd keep comfortable for breathing. e with local/regional/national/international regulations. Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricte by or directly under the supervision of a technically qualified individual as defined by TSCA. This lations for commercial purposes. es List (DSL) or the Canadian Non-Domestic Substances List (NDSL).
SARA Section 313 (specific toxic chemical listings) Substant California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not list Prop 65 - Developmental toxicity, male Substance is not lister. Information about limitation of use: For use only by technical Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the R The conditions of restrictions according to Article 67 and A market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisate Chemical safety assessment: A Chemical Safety Assessment	iot listed. ed. ally qualified individuals. REACH Regulations (EC) No. 1907/2006. Substance is not listed. Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the tion for use) Substance is not listed.
Department issuing SDS: Global Marketing Department	o other information gathered by them, and should make independent judgement of suitability of this fiety of employees. This information is furnished without warranty, and any use of the product not in th any other product or process, is the responsibility of the user. ersion number are in the header of each page. (European Agreement concerning the International Carriage of Dangerous Goods by Road)