



Page 1/5 Printing date 04/06/2017 Revision date 04/05/2017 Version 1

1 Identification Product identifier Product name: 2,5-Dichlorophenol Stock number: B24787, L01928 CAS Number: 583-78-8 **EC number:** 209-520-4 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 www.alfa.com Information Department: Health, Safety and Environmental Department Fmergency telephone number: **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) ! GHS07 Acute Tox. 4 H302 Harmful if swallowed. 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 H302 Harmful if swallowed. H315 Causes skin irritation. H315 Causes skin irritation. H319 Causes serious eye irritation. H355 May cause respiratory irritation. **Precautionary statements** P273 Avoid release to the environment. P280 Wear protective gloves / protective clothing. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. **WHMIS** classification WHMIS classification D1B - Toxic material causing immediate and serious toxic effects D2B - Toxic material causing other toxic effects Ţ Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)
 EALTH
 2
 Health (acute effects) = 2

 IRE
 I
 Flammability = 1

 escrivity[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: 583-78-8 2,5-Dichlorophenol Concentration: ≤100% Identification number(s): EC number: 209-520-4 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. (Contd. on page 2)

(Contd. of page 1)

Product name: 2,5-Dichlorophenol

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** Causes skin irritation. Harmful if swallowed. 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 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 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 Ensure adequate ventiliation Environmental precautions: Do not allow product to reach sewage system or any water course. Methods and material for containment and cleaning up: Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation. 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-2: Substance is not listed. PAC-3: Substance is not listed.

7 Handling and storage

Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. 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: 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: 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 P100 (USA) or P3 (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

Protection of nands: 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. Material of gloves Nitrile rubber, NBR Penetration time of glove material (in minutes) 480 Glove thickness: 0.11 mm Eye protection: Safety glasses with side shields / NIOSH (US) or EN 166(EU)

(Contd. on page 3)

(Contd. of page 2)

Product name: 2,5-Dichlorophenol

Body protection: Protective work clothing

Body protection: Protective work clothing.		
9 Physical and chemical properties	S	
Information on basic physical and ch General Information	iemical properties	
Appearance:		
Form: Odor:	Solid Phenol-like	
Odor threshold:	Not determined.	
pH-value: Change in condition	Not applicable.	
Melting point/Melting range:	55-58 °C (131-136 °F)	
Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous)	211 °C (412 °F) Not determined	
Flammability (solid, gaseous) Ignition temperature:	Not determined. Not determined	
Decomposition temperature: Auto igniting:	Not determined Not determined.	
Danger of explosion:	Not determined.	
Explosion limits: Lower:	Not determined	
Upper:	Not determined	
Vapor pressure: Density:	Not applicable. Not determined	
Relative density Vapor density	Not determined. Not applicable.	
Evaporation rate Solubility in / Miscibility with	Not applicable.	
Water at 20 °C (68 °F):	2 g/l	
Partition coefficient (n-octanol/water) Viscosity:		
dynamic: kinematic:	Not applicable. Not applicable.	
Other information	No further relevant information available.	
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 Reacts with strong oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide Hydrogen chloride (HCI)		
11 Toxicological information Information on toxicological effects Acute toxicity: Harmful if swallowed. The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance. LD/LC50 values that are relevant for classification:		
Oral LD50 946 mg/kg (mouse)		
Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance. 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. Specific target organ system toxicity - single exposure: May cause respiratory irritation. Aspiration hazard: No effects known. Subacute to chronic toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance. 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 in Persistence and degradability No furt Bioaccumulative potential No further Mobility in soil No further relevant info Additional ecological information: General notes: Do not allow undiluted product or large Also poisonous for fish and plankton in Toxic to aquatic life. May cause long lasting harmful effects to Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.	ther relevant information available. relevant information available. rmation available. quantities to reach ground water, water course or sewage system. water bodies. to aquatic life.	
Other adverse effects No further relevant information available.		

- USA (Contd. on page 4) Product name: 2,5-Dichlorophenol

(Contd. of page 3)

	(Contd. of pa
13 Disposal considerations Waste treatment methods Recommendation Consult state, local or national regul Uncleaned packagings: Recommendation: Disposal must be made according t	
4 Transport information	
UN-Number	
DOT, IMDG, IATA UN proper shipping name	UN2020
DOT	Chlorophenols, solid
ADR IMDG	2020 Chlorophenols, solid CHLOROPHENOLS, SOLID, MARINE POLLUTANT CHLOROPHENOLS, SOLID
IATA Transport hazard class(es)	CHLOROPHENOLS, SOLID
DOT	
Class	6.1 Toxic substances
Label ADR	6.1
Class Label IMDG	6.1 (T2) Toxic substances 6.1
Class Label IATA	6.1 Toxic substances 6.1
Class Label	6.1 Toxic substances 6.1
Packing group DOT, ADR, IMDG, IATA	III
Environmental hazards: Marine pollutant (IMDG):	Yes (DOT) Symbol (fish and tree)
Special precautions for user EMS Number: Stowage Category	Warning: Toxic substances F-A,S-A A
Transport in bulk according to Annex II of MARPOL	73/78 and the IBC Code Not applicable.
Transport/Additional information:	
DOT Quantity limitations	On passenger aircraft/rail: 100 kg
Marine Pollutant (DOT):	On cargo aircraft only: 200 kg No
Remarks:	Special marking with the symbol (fish and tree).
IMDG Limited quantities (LQ) Excepted quantities (ÉQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
UN "Model Regulation":	UN 2020 CHLOROPHENOLS, SOLID, 6.1, III
5 Regulatory information Safety, health and environmental regulations/legisla GHS label elements The product is classified and label Hazard pictograms	n tion specific for the substance or mixture led in accordance with 29 CFR 1910 (OSHA HCS)
GHS07	
Signal word Warning	

Signal word Warning
Hazard statementsH302 Harmful if swallowed.H315 Causes skin irritation.H319 Causes serious eye irritation.H335 May cause respiratory irritation.Precautionary statementsP273Avoid release to the environment.P280Wear protective gloves / protective clothing.

(Contd. on page 5)

Product name: 2,5-Dichlorophenol

(Contd. of page 4) P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention.

National regulations All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory. All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings)

SARA Section 313 (specific toxic chemical listings) 583-78-8 2,5-Dichlorophenol 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, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Information about limitation of use: For use only by technically qualified individuals. Other regulations, limitations and prohibitive 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 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. Substance is not listed.

Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. 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 Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department
Date of preparation/Revision: Print date, revision date and version number are in the header of each page.

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
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 Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Dethal concentration, 50 percent
LD50: Lethal concentration, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
YPVB: very Persistent and very Bioaccumulative
ACGHH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Heatth Administration (USA)
IMP: National Toxicology Program (USA)
IMP: National Toxicology Program (USA)
Acute Tox: 4: Acute toxicity - Category 2
Eye Imit. 24: Senious eye damage/eye imitation - Category 2A
SYOT SE 3: Specific target organ toxicity (single exposure) - Category 3

USA