

Safety Data Sheet per OSHA HazCom 2012

1 Identification Product identifier Product name: 3,5-Dichloroiodobenzene Stock number: A13192, L07142 **CAS Number:** 3032-81-3 EC number: 221-216-3 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. 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) ! 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 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. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. P405 WHMIS classification D2B - Toxic material causing other toxic effects Ţ Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) Health (acute effects) = 1Flammàbility = 1 TIVITY 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: 3032-81-3 3,5-Dichloroiodobenzene Identification number(s): EC number: 221-216-3 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.

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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 freatment 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) Hydrogen iodide (HI) Advice for firefathers 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 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. Store in the dark Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Protect from exposure to light. 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 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. Protection of hands: Impervious gloves 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 Body protection: Protective work clothing. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Color: Powder Off-white Not determined Odor: Odor threshold: Not determined pH-value: Not applicable. Change in condition Melting point/Melting range: 56-58 °C (133-136 °F) Boiling point/Boiling range: Not determined

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Product name: 3,5-Dichloroiodoben	Product name: 3,5-Dichloroiodobenzene		
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Sublimation temperature / start: Flash point:	Not determined Not applicable		
Flammability (solid, gaseous) Ignition temperature:	Not determined. Not determined		
Decomposition temperature:	Not determined		
Auto igniting: Danger of explosion:	Not determined. Product does not present an explosion hazard.		
Explosion limits: Lower:	Not determined		
Upper:	Not determined		
Vapor pressure: Density: Deletico density	Not determined		
Relative density Vapor density	Not determined. Not applicable.		
Evaporation rate Solubility in / Miscibility with	Not applicable.		
Water: Partition coefficient (n-octanol/water)	Not determined r): 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 recomi	amended storage conditions		
Thermal decomposition / conditions to Possibility of hazardous reactions No	to be avoided: Decomposition will not occur if used and stored according to specifications.		
Conditions to avoid No further relevan			
Incompatible materials: Oxidizing agents			
Light Hazardous decomposition products:	:		
Carbon monoxide and carbon dioxide Hydrogen chloride (HCI)			
Hydrogen iodide (HI)			
11 Toxicological information			
Information on toxicological effects Acute toxicity: No effects known.			
LD/LC50 values that are relevant for o			
Skin irritation or corrosion: Causes sk Eye irritation or corrosion: Causes se	erious eye irritation.		
Sensitization: No sensitizing effects kno Germ cell mutagenicity: No effects kno	10WN.		
Carcinogenicity: No classification data Reproductive toxicity: No effects know	a on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. wn.		
Specific target organ system toxicity 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 effect			
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 inf Persistence and degradability No furth	ther relevant information available.		
Bioaccumulative potential No further r Mobility in soil No further relevant infor	relevant information available.	I	
Additional ecological information: General notes:			
Do not allow material to be released to t	the environment without proper governmental permits. quantities to reach ground water, water course or sewage system.		
Avoid transfer into the environment.			
Results of PBT and vPvB assessmen PBT: Not applicable. vPvB: Not applicable	<i>i</i> t		
vPvB: Not applicable. Other adverse effects No further releva	/ant information available.		
13 Disposal considerations			
Waste treatment methods			
Uncleaned packagings:	or national regulations to ensure proper disposal.		
Recommendation: Disposal must be made according to official regulations.			
14 Transport information Not a hazardous material for transportat			
UN-Number DOT, IMDG, IATA	None		
UN proper shipping name			
DOT, IMDG, IATA Transport hazard class(es)	None		
DOT, ADR, IMDG, IATA			
Class	None	(2id on page A)	
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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 IB	
Transport/Additional information:	Not dangerous according to the above specifications.
DOT Marine Pollutant (DOT):	No
P304+P340 IF INHALED: Remove person to fresh air and keep construction P405 Store locked up. P501 Dispose of contents/container in accordance with location National regulations All components of this product are listed in the U.S. Environmental Protential Components of this product are listed on the Canadian Non-Domestic SARA Section 313 (specific toxic chemical listings) Substance is not 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. Prop 65 - Developmental toxicity, male Substance is not listed. Information about limitation of use: For use only by technically qualified Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH RE The conditions of restrictions according to Article 67 and Annex XV market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for u. Chemical safety assessment: A Chemical Safety Assessment has not is to the second	ction/face protection. minutes. Remove contact lenses, if present and easy to do. Continue rinsing. comfortable for breathing. cal/regional/national/international regulations. ection Agency Toxic Substances Control Act Chemical substance Inventory. c Substances List (NDSL). t listed. ied individuals. Regulations (EC) No. 1907/2006. Substance is not listed. VII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the use) Substance is not listed.

VPVB: very Persistent and very Bioaccumulative ACGIH: American Conference 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)

USA