



1 Identification Product identifier Product name: 5-Hydroxyindole Stock number: L00858 CAS Number: 1953-54-4 EC number: 217-782-6 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: 1953-54-4 5-Hydroxyindole Identification number(s): EC number: 217-782-6 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. (Contd. on page 2)

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(Contd. of page 1) 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 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 Nitrogen oxides (NOX) Advice for fireficience 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 Concentration for 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 Recautions for safe nanoing 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: Not required. 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. Protection of hands: Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable 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 Information on basic physical and chemical properties General Information Appearance: Form: Color: Crystalline powder Cream Not determined Odor: Odor threshold: Not determined pH-value: Not applicable. Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 107-108 °C (225-226 °F) Not determined Not determined Flash point: Flammability (solid, gaseous) Not applicable Not determined.

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Ignition temperature:	Not determined	(Contd. of page 2
Decomposition temperature: Auto igniting:	Not determined Not determined.	
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.	
Lower:	Not determined	
Upper: Vapor pressure:	Not determined Not applicable. Not determined	
Density: Relative density	Not determined Not determined.	
Vapor density Evaporation rate	Not applicable. Not applicable.	
Solubility in / Miscibility with		
Water: Partition coefficient (n-octanol/water):	Not determined : Not determined.	
Viscosity: dynamic:	Not applicable.	
kinematic: Other information	Not applicable. No further relevant information available.	
Stability and reactivity Reactivity No information known. Chemical stability Stable under recomm Thermal decomposition / conditions to Possibility of hazardous reactions No Conditions to avoid No further relevant Incompatible materials: Oxidizing agen Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides	o be avoided: Decomposition will not occur if used and stored according to specifications. dangerous reactions known t information available.	
Reproductive toxicity: No effects know. Specific target organ system toxicity - Specific target organ system toxicity - Aspiration hazard: No effects known. Subacute to chronic toxicity: No effect	in irritation. rious eye irritation. own. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. <i>rn.</i> - repeated exposure: No effects known. - single exposure: May cause respiratory irritation.	
Do not allow undiluted product or large q Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further releva	elevant information available. mation available. he environment without proper governmental permits. quantities to reach ground water, water course or sewage system. t	
Disposal considerations Waste treatment methods		
	nr national regulations to ansure proper disposal	
Recommendation Consult state, local o Uncleaned packagings: Recommendation: Disposal must be ma		
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USA -

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oduct name: 5-Hydroxyindole	
	(Contd. of page 3)
Transport in bulk according to Annex II of MARPOL73/7	
Transport/Additional information: DOT	Not dangerous according to the above specifications.
Marine Pollutant (DOT):	No
5 Regulatory information Safety, health and environmental regulations/legislation GHS label elements The product is classified and labeled Hazard pictograms	1 specific for the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)
P405 Store locked up. P501 Dispose of contents/container in accords National regulations This product is not listed in the U.S. Environmental Protection This product is not listed in the U.S. Environmental Protection This product must not be used for commercial purposes or in for SARA Section 313 (specific toxic chemical listings) Subtract Chemical Subtract Prop 65 - Chemicals known to cause cancer Substance Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not Information about limitation of use: For use only by techn Other regulations, limitations and prohibitive regulation Substance of Very High Concern (SVHC) according to the The conditions of restrictions according to Article 67 and market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Author Chemical safety assessment: A Chemical Safety Assess Substance is and listed.	ng/eyė protection/face protection. for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. ir and keep comfortable for breathing. ance with local/regional/national/international regulations. ion Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted sed by or directly under the supervision of a technically qualified individual as defined by TSCA. This mulations for commercial purposes. bistance is not listed. is not listed. listed. listed. listed. he REACH Regulations (EC) No. 1907/2006. Substance is not listed. nd Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the risation for use) Substance is not listed.
conformance with this Material Safety Data Sheet, or in con	nt to other information gathered by them, and should make independent judgement of suitability of this I safety of employees. This information is furnished without warranty, and any use of the product not in mbination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Department Date of preparation / last revision 1/23/2015 / - Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Vorkplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal concentration, 50 percent VPW: 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)	

OSHA: Occupational Safety and Health Administratic NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)