



1 Identification Product identifier Product name: 6-Chloronicotinic acid Stock number: A15620, L09931 CAS Number: 5326-23-8 EC number: 226-201-5 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: 5326-23-8 6-Chloronicotinic acid Identification number(s): EC number: 226-201-5 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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(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 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) Nitrogen oxides (NOx) Possibly Hydrogen cyanide (HCN) Advice for firefighters Protective equivament: 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. 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 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 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. 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: Solid White Odor: Not determined Odor threshold: Not determined pH-value: Not applicable. Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Decomposes Not determined Not determined Flash point: Not applicable

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Product name: 6-Chloronicotinic ac	id		
		(Contd. of page 2)	
Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	Not determined. Not determined 192 °C (378 °F) Not determined.		
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.		
Lower: Upper:	Not determined 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: Partition coefficient (n-octanol/water)	Not determined ): Not determined.		
Viscosity: dynamic: kinematic:	Not applicable.		
Other information	Not applicable. No further relevant information available.		
10 Stability and reactivity			
Reactivity No information known. 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 No dangerous reactions known Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide Hydrogen chloride (HCI) Nitrogen oxides Possibly Hydrogen cyanide (HCN)			
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: Causes se	erious eye 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 orgań 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 effects 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 in	formation available.		
Aquatic toxicity: No further relevant in Persistence and degradability No furt Bioaccumulative potential No further	relevant information available.		
Mobility in soil No further relevant info. Additional ecological information:	rmation available.		
General notes: Do not allow material to be released to the 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 assessment PBT: Not applicable. vPvB: Not applicable			
vPvB: Not applicable. Other adverse effects No further relev.	rant 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 made according to official regulations.			
14 Transport information Not a hazardous material for transporta	tion.		
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		
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Product name: 6-Chloronicotinic acid			
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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.			
Transport/Additional information:	Not dangerous according to the above specifications.		
DOT			
Marine Pollutant (DOT):	No		
15 Regulatory information			
Safety, health and environmental regulations/legislation speci GHS label elements The product is classified and labeled in accor Hazard pictograms	fic for the substance or mixture Irdance with 29 CFR 1910 (OSHA HCS)		
GHS07			
P304+P340       IF INHALED: Remove person to fresh air and ker p405         Store locked up.       Store locked up.         P501       Dispose of contents/container in accordance with a components of this product are listed in the U.S. Environmental All components of this product are listed on the Canadian Non-Dor SARA Section 313 (specific toxic chemical listings) Substance 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.         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.	protection/face protection. veral minutes. Remove contact lenses, if present and easy to do. Continue rinsing. keep comfortable for breathing. vith local/regional/national/international regulations. al Protection Agency Toxic Substances Control Act Chemical substance Inventory. mestic Substances List (NDSL). e is not listed. isted. d. qualified individuals. ACH Regulations (EC) No. 1907/2006. Substance is not listed. nex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the		
<ul> <li>16 Other information         Employers should use this information only as a supplement to oth information to ensure proper use and protect the health and safety conformance with this Material Safety Data Sheet, or in combination     </li> <li>Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/23/2015 / - 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         CAME: 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, 50 percent         LD50: Lethal concentration and engrey Bioaccumulative         ACGIH: American Conference of Governmental Industrial Hygienists (USA)         OSHA: Occupational Safety and Health Administration (USA)         MTP: National Toxicology Program (USA)         MTP: National Toxicology Program (USA)         MAR: International Agency for Research on Cancer         MAR: International Agency for Research on Cancer</li></ul>	her information gathered by them, and should make independent judgement of suitability of this y of employees. This information is furnished without warranty, and any use of the product not in on with any other product or process, is the responsibility of the user.		

IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA) – USA –