

1 Identification Product identifier Product name: 6-Hydroxynicotinic acid Stock number: A15802, L04084 CAS Number: 5006-66-6 EC number: 5-682-9 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: 5006-66-6 6-Hydroxynicotinic acid Identification number(s): EC number: 225-682-9 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 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 Automati 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 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 Body protection: Protective work clothing. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Powder Color: Off-white Odor: Odor threshold: Not determined Not determined. pH-value: Not applicable Change in condition Melting point/Melting range: Boiling point/Boiling range: >300 °C (>572 °F) Not determined Sublimation temperature / start: Not determined Flash point: Not applicable Flammability (solid, gaseous) Ignition temperature: Not determined

Not determined

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Product name: 6-Hydroxynicotinic a		
Decomposition tomporature:	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.	
Density:	Not determined	
Relative density Vapor density	Not determined. Not applicable.	
Evaporation rate Solubility in / Miscibility with	Not applicable.	
Water:	Not determined	
Partition coefficient (n-octanol/water) Viscosity:	: Not determined.	
dynamic: kinematic:	Not applicable. Not applicable.	
Other information	No further relevant information available.	
10 Stability and reactivity		
Reactivity No information known. Chemical stability Stable under recom	mended storage conditions.	
Thermal decomposition / conditions a 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	t information available.	
Incompatible materials: Oxidizing age Hazardous decomposition products:	nis	
Carbon monoxide and carbon dioxide Nitrogen oxides		
-		
11 Toxicological information		
Information on toxicological effects Acute toxicity: No effects known.		
LD/LC50 values that are relevant for of Skin irritation or corrosion: Causes sl	classification: No data	
Eye irritation or corrosion: Causes se	rrious eye irritation.	
Sensitization: No sensitizing effects kn Germ cell mutagenicity: No effects kno	own.	
Carcinogenicity: No classification data	on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Reproductive foxicity: No effects know Specific target organ system toxicity	vn. - repeated exposure: No effects known.	
Specific target organ system toxicity Aspiration hazard: No effects known.	- single exposure: May cause respiratory irritation.	
Subacute to chronic toxicity: No effect	ts 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 inf Persistence and degradability No furth	her relevant information available.	
Bioaccumulative potential No further i Mobility in soil No further relevant infor	relevant information available. rmation available	
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.	
Results of PBT and vPvB assessmen	t	
<b>PBT:</b> Not applicable. <b>vPvB:</b> Not applicable.		
Other adverse effects No further releva	ant information available.	
13 Disposal considerations		
Waste treatment methods		
Recommendation Consult state, local of Uncleaned packagings:	or national regulations to ensure proper disposal.	
Recommendation: Disposal must be m	nade according to official regulations.	
14 Transport information		
Not a hazardous material for transportat	tion.	
UN-Number DOT, IMDG, IATA	None	
UN proper shipping name DOT, IMDG, IATA	Maria	
DOT, IMDG, IATA Transport hazard class(es)	None	
DOT, ADR, IMDG, IATA		
Class	None	
Packing group DOT, IMDG, IATA	None	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
	( II of MARPOL73/78 and the IBC Code Not applicable.	
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Transport/Additional information:	Not dangerous according to the above specifications.
DOT Marine Pollutant (DOT):	No
	110
Hazard pictograms Figure 1: Signal word Warning Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. H310 Causes serious eye irritation. Precautionary statements P261 Avoid breathing dust/fume/gas/mi P305+P351+P338 IF IN EYES: Rinse cautiously with P304+P340 IF INHALED: Remove person to f P405 Store locked up. P501 Dispose of contents/container in a National regulations All components of this product are listed in the U.S. E All components of this product are listed in the U.S. E All components of this product are listed on the Cana SARA Section 313 (specific toxic chemical listing California Proposition 65 Prop 65 - Developmental toxicity, female Substance Prop 65 - Developmental toxicity, female Substance Prop 65 - Developmental toxicity, male Substance is not Prop 65 - Developmental toxicity, male Substance Information about limitations and prohibitive regu Substance of Very High Concern (SVHC) accordin The conditions of restrictions according to Article market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring A Chemical safety assessment: A Chemical Safety A	ist/vapours/spray. a clothing/eye protection/face protection. h water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. fresh air and keep comfortable for breathing. accordance with local/regional/national/international regulations. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory. adian Domestic Substances List (DSL). <b>15</b> Substance is not listed. Stance is not listed
6 Other information Employers should use this information only as a supp information to ensure proper use and protect the bea	plement to other information gathered by them, and should make independent judgement of suitability of this alth and safety of employees. This information is furnished without warranty, and any use of the product not i
conformance with this Material Safety Data Sheet, or Department issuing SDS: Global Marketing Departi Date of preparation / last revision 11/23/2015 / - Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation HATA: International Air Transportation EINECS: European Inventory of Existing Commercial Chemical Subst CAS: Chemical Abstracts Service (division of the American Chemical Subst HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canade LOSO: Lethal concentration, 50 percent UDSO: Lethal concentration, 50 percent VPW: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists ( OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency (or Research on Cancer EPA: Environmental Protection Agency (USA)	r in combination with any other product or process, is the responsibility of the user.