

Safety Data Sheet per OSHA HazCom 2012

1 Identification Product identifier Product name: 5-Methyl-2-nitrobenzoic acid Stock number: L06594 CAS Number: 3113-72-2 EC number: 221-481-5 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: 3113-72-2 5-Methyl-2-njtrobenzoic acid Identification number(s): EC number: 221-481-5 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. (Contd. on page 2) Product name: 5-Methyl-2-nitrobenzoic acid

(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 Precautions for safe manuning 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 Pále yellow 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: 134-136 °C (273-277 °F) Not determined Not determined Flash point: Flammability (solid, gaseous) Not applicable Not determined.

(Contd. on page 3)

Product name: 5-Methyl-2-nitrobenzoic acid

Product name: 5-Methyl-2-nitrobenz		
Ignition tomporatures	Not determined	(Contd. of page 2)
Ignition temperature: Decomposition temperature: Auto igniting:	Not determined Not determined Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits: Lower:	Not determined	
Upper:	Not determined	
Vapor pressure: Density:	Not applicable. Not determined	
Relative density	Not determined.	
Vapor density Evaporation rate	Not applicable. Not applicable.	
Solubility in / Miscibility with	Insoluble	
Water: Partition coefficient (n-octanol/water)	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 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 Nitrogen oxides		
11 Toxicological information Information on toxicological effects Acute toxicity: No effects known. LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: Causes skin irritation. Eye irritation or corrosion: Causes serious eye irritation. Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No effects known. Carcinogenicity: 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: 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 inf Persistence and degradability No furth Bioaccumulative potential No further re Mobility in soil No further relevant infor Additional ecological information: General notes: Do not allow material to be released to the Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant	rer relevant information available. elevant information available. mation available. he environment without proper governmental permits. t	
13 Disposal considerations		
Waste treatment methods	or national regulations to ensure proper disposal. ade according to official regulations.	
14 Transport information Not a hazardous material for transportati	ion.	
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	
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.	
		(Contd. on page 4)

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Product name: 5-Methyl-2-nitrobenzoic acid		
	(Contd. of page 3)	
Transport/Additional information: DOT	Not dangerous according to the above specifications.	
DOT Marine Pollutant (DOT):	No	
GHS Tabel elements The product is classified an Hazard pictograms GHS07 Signal word Warning Hazard statements H315 Causes skin irritation.	/legislation specific for the substance or mixture nd labeled in accordance with 29 CFR 1910 (OSHA HCS)	
H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements P261 Avoid breathing dust/fume/ga. P280 Wear protective gloves/protect P305+P351+P338 IF IN EYES: Rinse cautiously P304+P340 IF INHALED: Remove person P405 Store locked up. P501 Dispose of contents/container National regulations All components of this product are listed in the U. All components of this product are listed on the C SARA Section 313 (specific toxic chemical lis California Proposition 65 Prop 65 - Chemicals known to cause cancer S Prop 65 - Developmental toxicity, female Substance is Prop 65 - Developmental toxicity, male Substal Information about limitation of use: For use or Other regulations of restrictions according to Ar Information so restrictions according to Ar Market and use must be observed. Substance is not listed. Substance is not listed.	ctive clothing/eyé protection/face protection. with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. to fresh air and keep comfortable for breathing. r in accordance with local/regional/national/international regulations. S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory. Canadian Non-Domestic Substances List (NDSL). tings) Substance is not listed. Substance is not listed. Substance is not listed. not listed. not listed. not listed. not listed. not bisted. not bisted. not bisted. not bisted. regulations ording to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. rticle 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the ting Authorisation for use) Substance is not listed.	
information to ensure proper use and protect the conformance with this Material Safety Data Shee	supplement to other information gathered by them, and should make independent judgement of suitability of this health and safety of employees. This information is furnished without warranty, and any use of the product not in t, or in combination with any other product or process, is the responsibility of the user.	
Department issuing SDS: Global Marketing Dep Date of preparation / last revision 11/23/2015 / Abbreviations and accronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association HATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical S CAS: Chemical Abstracts Service (division of the American Chem HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Ca LCSO: Lethal concentration, 50 percent USA): Lethal dose, 50 percent vPvB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygien OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	Substances nical Society)	