



	100/21/2000
1 Identification	
Product identifier	
Product name: <u>4-Methyl-2-(methylthio)pyrimidine</u>	
Stock number: H28795 CAS Number:	
14001-63-9 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. 30 Bond Street	
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: Call Carechem 24 at +44 (0) 1865 407333 During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-	0700
	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. 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. Precautionary statements 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 rinsin P362 Take off contaminated clothing. P321 Specific treatment (see on this label). P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P387 Toxic material causing other toxic effects	g.
\bigcirc	
Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	
HEALTH 1 Health (acute effects) = 1	
FRE I Flammability = 1 REACTIVITY II 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: 14001-63-9 4-Methyl-2-(methylthio)pyrimidine	
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.	
Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.	
After swallowing Seek medical tréatment. Information for doctor	
Most important symptoms and effects, both acute and delayed No further relevant information available.	(Contd. on page 2)
	USA —

Flammability (solid, gaseous) Ignition temperature:

Decomposition temperature:

Auto igniting:

Not determined. Not determined

Not determined

Not determined

Product name: 4-Methyl-2-(methylthio)pyrimidine (Contd. of page 1) Indication of any immediate medical attention and special treatment 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) Sulfur oxides (SOx) 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: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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 precationary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all solied 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 not only depends on the material, but also on quality. Penetration time of glove material (in minutes) Not determined Eye protection: Safety glasses Body protection: Protective work clothing. Exposure controls 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Color: Liquid Yellow Not determined Odor: Odor threshold: Not determined. pH-value: Not determined. Change in condition Melting point/Melting range: Boiling point/Boiling range: Not determined Not determined Sublimation temperature / start: Not determined Flash point: 104 °C (219 °F)

(Contd. on page 3)

Product name: 4-Methyl-2-(methylthio)pyrimidine

Page 3/4 Printing date 11/24/2015 Reviewed on 08/27/2008

Reactivity No information known. Chemical stability Stability control / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous to dangerous reactions known Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon moxide and carbon dioxide Nitrogen oxides Sulfur oxides (SOx) 11 Toxicological information Information on toxicological effects Acute toxicity: No effects known. EVELCES values that are relevant for classification: No data Sin in rirdiation or corrosion: Causes serious eye inflation. Eye inflation or corrosion: Causes serious eyes: No effects known. Garcinogenicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration fuzzeri. No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. 212 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Bioaccumulative potential No further relevant information available. Bioaccumulative potential No further relevant information available. Bioaccumulative potential No further relevant information available. Additional ecological information: Conterity Apuals toxicity: No effects known available. Bioaccumulative potential No further relevant information available. Additional ecological information: Conterity PDT: Not applicable. Additional ecological info			(Contd. of page 2
Internal decomposition / conditions to be avoided: Lecomposition will not occur if used and stored according to specifications. Conditions to avoid 0 to further relevant information available. Incompatible materials: Oxidian agents Mazar loss decomposition products: Incompatible materials: Oxidian agents Maxar loss decomposition products: Normed to toxicity: No effects known. EDUI CSO values that are relevant for classification: No data Sim inflation or correspon: Causes skin mitation. Sensitization: No sensitizing effects known. Germ cell mutegenicity: No effects known. Sensitization: No sensitizing effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Subscure 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. It ecological information: Tokicological information: Tokicological information: Tokicological information: Tokicological information: It ecological information: It ecological information: It ecological information: It ecological information: It has a degradability is a substance information available. Bioaccumulative potential NG further relevant information available. Bioaccumulative potential NG further relevant information available. If ecological information: If ecological information:	Explosion limits: Lower: Upper: Vapor pressure: Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Viscosity: dynamic: kinematic: Other information 10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recomm	Not determined Not determined Not determined 1.01 g/cm ³ (8.428 lbs/gal) Not determined. Not determined. Not determined. Not determined. Not determined. Not determined. Not determined. Not determined. Not determined.	(Contd. or page
Information on toxicological effects Acute toxicity: No effects known. LDL CSD values that are relevant for classification: No data Skin initiation or corrosion: Causes skin mitation. Sensitization: No sensitizing effects known. Genr cell mutagenicity: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known exposure: No effects known. Specific target o	Thermal decomposition / conditions to Possibility of hazardous reactions No o Conditions to avoid No further relevant i Incompatible materials: Oxidizing agent Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides	be avoided: Decomposition will not occur it used and stored according to specifications. dangerous reactions known information available	
Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Mobility in soll No further relevant information available. Mobility in soll No further relevant information available. Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Avoid transfer into the environment. Results of PBT and VPM assessment PBT: Not applicable. VPW: Not applicable. Other adverse effects No further relevant information available. I3 Disposal considerations Waste treatment methods Recommendation: Disposal must be made according to official regulations. 14 Transport information Not a hazardous material for transportation. UN-Number DOT, IMDG, IATA None DOT, IMDG, IATA None Transport hazard class(es) None DOT, IMDG, IATA None Dord, IMDG, IATA None Packing group DOT, IMDG, IATA None Pac	Acute toxicity: No effects known. LD/LC50 values that are relevant for cla Skin irritation or corrosion: Causes skin Eye irritation or corrosion: Causes seri Sensitization: No sensitizing effects known Germ cell mutagenicity: No effects known Carcinogenicity: No classification data or Reproductive toxicity: No effects known Specific target organ system toxicity - Specific target organ system toxicity - Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects	n irritation. ous eye irritation. wn. n carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. n carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. repeated exposure: No effects known. single exposure: No effects known. s known.	
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 transportation. UN-Number DOT, IMDG, IATA None UN proper shipping name DOT, IMDG, IATA None Transport hazard class(es) None DOT, ADR, IMDG, IATA None Packing group DOT, IMDG, IATA None Packing transport 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. Not applicable.	Aquatic toxicity: No further relevant info Persistence and degradability No further Bioaccumulative potential No further Mobility in soil No further relevant inform 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	er relevant information available. levant information available. nation available. e environment without proper governmental permits.	
UN-Number DOT, IMDG, IATA None UN proper shipping name DOT, IMDG, IATA None Transport hazard class(es) None DOT, ADR, IMDG, IATA None Packing group DOT, IMDG, IATA None Packing group DOT, IMDG, IATA None Packing group DOT, IMDG, IATA None Environmental hazards: None Special precautions for user Not applicable. Transport in bulk according to Annex II of MARPOLT3/78 and the IBC Code Not applicable. Not applicable.	Recommendation Consult state, local or Uncleaned packagings:	5 I I I	
UN-Number DOT, IMDG, IATA None UN proper shipping name DOT, IMDG, IATA None Transport hazard class(es) None DOT, ADR, IMDG, IATA None Packing group DOT, IMDG, IATA None Packing group DOT, IMDG, IATA None Packing group DOT, IMDG, IATA None Environmental hazards: None Special precautions for user Not applicable. Transport in bulk according to Annex II of MARPOLT3/78 and the IBC Code Not applicable. Not applicable.	14 Transport information Not a hazardous material for transportatio	n.	
Transport hazard class(es) DOT, ADR, IMDG, IATA Class None Packing group None DOT, IMDG, IATA None Environmental hazards: Not applicable. Special precautions for user Not applicable. Transport in bulk according to Annex II of MARPOLT3/78 and the IBC Code Not applicable.	UN-Number		
DOT, ADR, IMDG, IATA None Packing group DOT, IMDG, IATA 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.		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.	DOT, ADR, IMDG, IATA	None	
Special precautions for user Not applicable. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.	Packing group DOT, IMDG, IATA	None	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.			
	Special processions for user	Not applicable.	

oduct name: 4-Methyl-2-(methylthio)p	Jyrimiaine
	(Contd. of pag
DOT Marine Pollutant (DOT):	No
Regulatory information Safety, health and environmental regulation GHS label elements The product is classifier Hazard pictograms	ons/legislation specific for the substance or mixture ad and labeled in accordance with 29 CFR 1910 (OSHA HCS)
P305+P351+P338 IF IN EYES: Rinše caution P362 Take off contaminated clo P321 Specific treatment (see or P332+P313 If skin irritation occurs: Ge P337+P313 If eye irritation persists: G National regulations This product is not listed in the U.S. Environm	n thiš label). et medical advice/attention. Set medical advice/attention. mental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restrict
product must not be used for commercial pur SARA Section 313 (specific toxic chemical California Proposition 65 Prop 65 - Chemicals known to cause canc Prop 65 - Developmental toxicity Substance Prop 65 - Developmental toxicity, female S Prop 65 - Developmental toxicity, male Su Information about limitation of use: For us Other regulations, limitations and prohibit Substance of Very High Concern (SVHC) a The conditions of restrictions according to market and use must be observed. Substance is not listed.	ce is not listed. Substance is not listed. bistance is not listed. se only by technically qualified individuals. tive regulations according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on t quiring Authorisation for use) Substance is not listed.
Other information Employers should use this information only a information to ensure proper use and protect conformance with this Material Safety Data S	as a supplement to other information gathered by them, and should make independent judgement of suitability of this t the health and safety of employees. This information is furnished without warranty, and any use of the product not ir Sheet, or in combination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Date of preparation / last revision 1/24/20 Abbreviations and acronyms: RID: Règlement international concernant le transport des m IATA-DGR: Dangerous Goods Regulations by the "Internation ICAO: International Civil Aviation Organization ICAO: The Technical Instructions by the "Internation ICAO: The Technical Instructions by the "Internation ICAO: The Technical Instructions by the "Internation ICAO: The Technical Instructions by the "International Civil Avi IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Abstracts Service (division of the American HMIS: Hazardous Materials Information System (USA) WHMIS: Workplace Hazardous Materials Information System LCSO: Lethal concentration, 50 percent UPUB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial H OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	D15 ⁷ - narchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ional Air Transport Association" (IATA) wiation Organization" (ICAO) Chemical Society) am (Canada)