

Safety Data Sheet per OSHA HazCom 2012

1 Identification Product identifier Product name: 6-Fluoro-2-methylquinoline Stock number: A11469 CAS Number: 128-61-6 EC number: 214-439-2 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: 1128-61-6 6-Fluoro-2-methylquinoline Identification number(s): EC number: 214-439-2 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: 6-Fluoro-2-methylquinoline

(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 fluoride (HF) Nitrogen oxides (NOx) Hydrogen cyanide (HCN) Advice for firefighters Protective equivement: 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 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. 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: Powder Color: White Odor: Odor threshold: Not determined Not determined. pH-value: Not applicable.

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	52-56 °C (126-133 °F) Not determined Not determined

(Contd. on page 3)

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		(Contd. of page 2)		
Flash point: Flammability (solid, gaseous)	Not applicable Not determined.			
Ignition temperature: Decomposition temperature:	Not determined Not determined			
Auto igniting:	Not determined.			
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.			
Lower: Upper:	Not determined Not determined			
Vapor pressure:	Not determined			
Density: Relative density	Not determined.			
Vapor density Evaporation rate	Not applicable. Not applicable.			
Solubility in / Miscibility with Water:	Insoluble			
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 Thermal decomposition / conditions	mended storage conditions. to be avoided: Decomposition will not occur if used and stored according to specifications.			
Possibility of hazardous reactions No Conditions to avoid No further relevar	o dangerous reactions known			
Incompatible materials: Oxidizing age Hazardous decomposition products:	ints			
Carbon monoxide and carbon dioxide				
Hydrogen fluoride Nitrogen oxides				
Hydrŏgen cyanide				
11 Toxicological information				
Information on toxicological effects Acute toxicity: No effects known.				
LD/LC50 values that are relevant for				
Eye irritation or corrosion: Causes se	Skin irritation or corrosion: Causes skin irritation. Sy irritation or corrosion: Causes serious eye irritation.			
Germ cell mutagenicity: No effects kn	Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known.			
Reproductive toxicity: No effects know	a on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.			
Specific target organ system toxicity Specific target organ system toxicity	r - repeated exposure: No effects known. r - single exposure: May cause respiratory irritation.			
Aspiration hazard: No effects known. Subacute to chronic toxicity: No effect				
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 information available. Persistence and degradability No further relevant information available.				
Bioaccumulative potential No further Mobility in soil No further relevant info				
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 vPvB assessment				
			PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.	
	מה ההסווזימניטרו מעמוומטוב.			
13 Disposal considerations Waste treatment methods				
Recommendation Consult state, local	or national regulations to ensure proper disposal.			
Uncleaned packagings: Recommendation: Disposal must be n	nade according to official regulations.			
14 Transport information				
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)	NUNC			
DOT, ADR, IMDG, IATA	Maria			
Class Packing group	None			
Packing group DOT, IMDG, IATA	None			
		(Contd. on page 4) USA —		

oduct name: 6-Fluoro-2-methylquinoline	
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Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73	
Transport/Additional information:	Not dangerous according to the above specifications.
DOT Marine Pollutant (DOT):	No
mannor ondan (201).	
 Regulatory information Safety, health and environmental regulations/legislati GHS label elements The product is classified and labele Hazard pictograms GHS07 Signal word Warning Hazard statements H315 Causes skin irritation. H335 May cause respiratory irritation. 	ion specific for the substance or mixture ad in accordance with 29 CFR 1910 (OSHA HCS)
P304+P340 IF INHALED: Remove person to fresh P405 Store locked up. P501 Dispose of contents/container in accord National regulations This product is not listed in the U.S. Environmental Protect to research and development only. This product must be product must not be used for commercial purposes or in f SARA Section 313 (specific toxic chemical listings) S California Proposition 65 Prop 65 - Developmental toxicity, Substance is not lister Prop 65 - Developmental toxicity, female Substance is not listed is not limitation of use: For use only by text Other regulations, limitations and prohibitive regulati Substance of Very High Concern (SVHC) according to	thing/eye protection/face protection. ter for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. a air and keep comfortable for breathing. ordance with local/regional/national/international regulations. ection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restric used by or directly under the supervision of a technically qualified individual as defined by TSCA. This formulations for commercial purposes. Substance is not listed. ed. a not listed.
market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Auth Chemical safety assessment: A Chemical Safety Asses	norisation for use) Substance is not listed.
Conter information Employers should use this information only as a supplem information to ensure proper use and protect the health a conformance with this Material Safety Data Sheet, or in content Department issuing SDS: Global Marketing Department	nent to other information gathered by them, and should make independent judgement of suitability of this and safety of employees. This information is furnished without warranty, and any use of the product not i combination with any other product or process, is the responsibility of the user.
Date of preparation / last revision 11/23/2015 / - Abbreviations and acronyms: RID: Reglement international concernant le transport des marchandises dan IATA-DGR: Dangerous Goods Regulations by the "International Air Transpo	• ngereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ort Association" (IATA)
ICAO-TI: Technical Instructions by the "International Civil Aviation Organizat 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 Societ	ngereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ort Association" (ICAO) s ty)
HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent UD50: Lethal dose, 50 percent VPUB: very Persistent and very Bioaccumulative ACGH: American Conference of Concemposital Industrial Elucionists (USA)	
OSHA: Occupational Safety and Health Administration (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer	