

Safety Data Sheet per OSHA HazCom 2012

1 Identification Product identifier Product name: 5-Methylbenzo[b]thiophene Stock number: A12666, L10280 CAS Number: 14315-14-1 EC number: 238-256-2 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) Set. GHS06 Skull and crossbones Acute Tox. 3 H301 Toxic if swallowed. 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 GHS06 Signal word Danger Hazard statements H301 Toxic if swallowed.

 H301 Foxic if swallowed.

 Precautionary statements

 P264
 Wash thoroughly after handling.

 P270
 Do not eat, drink or smoke when using this product.

 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...

 P321
 Specific treatment (see on this label).

 P405
 Store locked up.

 Dispose of contents/container in accordance with local/regional/nat

P501 Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification Not controlled Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) Health (acute effects) = 2 Flammability = 1 Flammability = 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: 14315-14-1 5-Methylbenzo[b]thiophene Identification number(s): EC number: 238-256-2 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. 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 treatment needed No further relevant information available.

(Contd. on page 2)

Product name: 5-Methylbenzo[b]thiophene

(Contd. of page 1)

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 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

Ensure adequate ventilation Environmental precautions: Do not allow product to reach sewage system or any water course. Methods and material for containment and cleaning up: Dispose of contaminated material as waste according to section 13. 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: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data

Exposure controls

Personal protective equipment General protective and hygienic measures

General protective and hygenic 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. 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

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 ch General Information Appearance: Form: Color: Odor: Odor: Odor threshold:	solid White to pale brown Not determined Not determined.
pH-value:	Not applicable.
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	32-36 °C (90-97 °F) 71-73 °C (160-163 °F) (0.6mm) Not determined Not determined. Not determined Not determined Not determined Not determined.
Danger of explosion: Explosion limits: Lower: Upper: Vapor pressure:	Not determined. Not determined Not determined Not applicable.

Product name: 5-Methylbenzo[b]thiophene

		(Contd. of page 2
Density at 20 °C (68 °F):	1.11 g/cm ³ (9.263 lbs/gal)	
Relative density Vapor density	Not determined. Not applicable.	
Evaporation rate Solubility in / Miscibility with	Not applicable.	
Water:	Insoluble	
Partition coefficient (n-octanol/water) Viscosity:	: Not determined.	
dynamic:	Not applicable.	
kinematic: Other information	Not applicable. No further relevant information available.	
0 Stability and reactivity		
Reactivity No information known.	mandad ataraga conditiona	
Thermal decomposition / conditions t	mended storage conditions. to be avoided: Decomposition will not occur if used and stored according to specifications. pacts with strong ovidizing agents.	
Possibility of hazardous reactions Re Conditions to avoid No further relevan	acis with strong oxidizing agents	
Incompatible materials: Oxidizing age	nts	
Hazardous decomposition products: Carbon monoxide and carbon dioxide		
Sulfur oxides (SOx)		
1 Toxicological information		
Information on toxicological effects		
Acute toxicity: Toxic if swallowed. LD/LC50 values that are relevant for c	classification: No data	
Skin irritation or corrosion: May cause	e irritation	
Eye irritation or corrosion: May cause Sensitization: No sensitizing effects kno	irritation	
Germ cell mutagenicity: No effects kno	own.	
Carcinogenicity: No classification data Reproductive toxicity: No effects know	on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Specific target organ system toxicity	- repeated exposure: No effects known.	
Specific target organ system toxicity Aspiration hazard: No effects known.	- single exposure: No effects known.	
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.	
2 Ecological information		
Toxicity		
Aquatić toxicity: No further relevant inf Persistence and degradability No furth	ormation available. her relevant information available.	
Bioaccumulative potential No further r Mobility in soil No further relevant infor	elevant information available.	
Additional ecological information:	mation available.	
General notes:		
Avoid transfer into the environment.	quantities to reach ground water, water course or sewage system.	
Results of PBT and vPvB assessmen	t	
PBT: Not applicable. vPvB: Not applicable.		
Other adverse effects No further releva	ant information available.	
3 Disposal considerations		
Waste treatment methods		
Recommendation Consult state, local of Uncleaned packagings:	or national regulations to ensure proper disposal.	
Recommendation: Disposal must be m	ade according to official regulations.	
4 Transport information		
UN-Number DOT, ADN, IMDG, IATA	Natappliable	
, , ,	Not applicable	
UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
Packing group DOT, IMDG, IATA		
	Not applicable	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
	r II of MARPOL73/78 and the IBC Code Not applicable.	
Transport/Additional information:		
DOT Marine Pollutant (DOT):	No	
UN "Model Regulation":	-	

Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

(Contd. on page 4)

Product name: 5-Methylbenzo[b]thiophene

(Contd. of page 3) Hazard pictograms R GHS06 Signal word Danger Hazard statements

 Hazard statements

 H301 Toxic if swallowed.

 Precautionary statements

 P264
 Wash thoroughly after handling.

 P270
 Do not eat, drink or smoke when using this product.

 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...

 P321
 Specific treatment (see on this label).

 P405
 Store locked up.

 P501
 Dispose of contents/container in accordance with local/regional/nail

P501 Dispose of contents/container in accordance with local/regional/national/international regulations. National regulations. National regulations This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes. This product is not listed on the Canadian Domestic Substances List (NDSL). SAPA Section 212 (cneeding of the character of the characte This product is not listed on the Canadan Domestic Substances List (DSL) of the Cana SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, female 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. Other regulations limitation of use: For use only by technically qualified individuals. Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. Substance is not liste Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out. 16 Other information Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. Conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the use Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) DOT: US Department of Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical 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 PVPB: very Persistent and very Bioaccumulative ACGIH:: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) MTP: National Toxicology Program (USA) MTP: Na USA