

Safety Data Sheet per OSHA HazCom 2012

1 Identification
Product identifier Product name: 5-Chloro-2-methylphenyl isocyanate
Stock number: L11567 CAS Number: 40411-27-6
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
Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757
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)
GHS06 Skull and crossbones
Acute Tox. 2 H330 Fatal if inhaled.
GHS08 Health hazard
Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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
GHS06 GHS08
Signal word Danger Hazard statements
H330 Fatal if inhaled. H315 Causes skin irritation.
H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation. Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P284 [In case of inadequate ventilation] wear respiratory 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. P320 Specific treatment is urgent (see on this label).
P300 Specific treatment is urgent (see on this label). P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
WHMIS classification
D1A - Very toxic material causing immediate and serious toxic effects D2A - Very toxic material causing other toxic effects
Classification system HMIS ratings (scale 0.4)
HMIS ratings (scale 0-4) (Hazardous Materials Identification System)
HEALTH I Health (acute effects) = 3 FIRE I Flammability = 1 Flammability = 1
REACTIVITY D Physical Hazard = 1 Other hazards
Results of PBT and vPvB assessment PBT: Not applicable.
vPvB: Not applicable.

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Store under dry inert gas. This product is moisture sensitive. Keep container tightly sealed. Protect from humidity and water. Refrigerate Specific end use(s) No further relevant information available. 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.	Protect from heat. Store away from water/moisture.	
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The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed.	Personal protective equipment General protective and hygienic measures	
Demons all applied and contaminate distaling immediately	The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed.	
cernove an somed and contaminated clothing immediately. (Contd. on page	Remove all soiled and contaminated clothing immediately.	(Contd. on page 3

	F	Reviewed on 05/28/2009
Product name: 5-Chloro-2-methylph	enyl isocyanate	
Protection of hands: Impervious gloves	orking environment. ed respiratory protective device in emergency situations. e for their proper condition. depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. minutes) Not determined	(Contd. of page 2)
9 Physical and chemical properties	·	
Information on basic physical and che General Information Appearance: Form: Color:		
Odor:	Pungent	
Odor threshold: pH-value:	Not determined. Not determined.	
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined. Not determined 115 °C (239 °F) (5mm Hg) Not determined	
Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	108 °C (226 °F) Not determined. Not determined Not determined Not determined.	
Danger of explosion: 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):	Product does not present an explosion hazard. Not determined Not determined 1.226 g/cm³ (10.231 lbs/gal) Not determined. Not determined. Not determined. Hydrolyzes Not determined	
Viscosity: dynamic: kinematic: Other information	Not determined. Not determined. No further relevant information available.	
10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recomm Thermal decomposition / conditions to Possibility of hazardous reactions No Conditions to avoid No further relevant Incompatible materials: Alcohols Amines Oxidizing agents Heat Water/moisture Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides Hydrogen cyanide Hydrogen chloride (HCI)	nended storage conditions. b be avoided : Decomposition will not occur if used and stored according to specifications. dangerous reactions known information available.	
11 Toxicological information Information on toxicological effects Acute toxicity: Fatal if inhaled. LD/LC50 values that are relevant for c Skin irritation or corrosion: Causes ski Eye irritation or corrosion: Causes ser Sensitization: May cause allergy or asth Germ cell mutagenicity: No effects know Carcinogenicity: No classification data Reproductive toxicity: No effects know. Specific target organ system toxicity:	in irritation. ious eye irritation. ma symptoms or breathing difficulties if inhaled. wn. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. n. - repeated exposure: No effects known. - single exposure: May cause respiratory irritation.	

Subacute to chronic toxicity: No enects known. Subacute to chronic toxicity: Isocyanates are extremely irritating to the skin, eyes and mucous membranes. Exposure may be fatal. Symptoms include burning sensation, coughing, wheezing, Iaryngitis, headache, nausea and vomiting. 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.

(Contd. of page 3)
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6. Isocyanates, toxic, n.o.s. (5-Chloro-2-methylphenyl isocyanate), 6.1, II
e or mixture 910 (OSHA HCS) e contact lenses, if present and easy to do. Continue rinsing. nal/international regulations. Control Act Chemical Substance Inventory. Use of this product is restricted upervision of a technically qualified individual as defined by TSCA. This

This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restri 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. SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. (Contd. on pa

(Contd. on page 5) USA

Product name: 5-Chloro-2-methylphenyl isocyanate

(Contd. of page 4)

Conta. of page 4 Information about 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. market and use must be observed. Substance is not listed. 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 user.
Department issuing SDS: Global Marketing Department
Date of preparation / last revision 11/24/2015 / Abbreviations and acronyms:
RiD: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritume Code for Dangerous Goods
DOT: US Department of Transport Association
(ICAO)
IADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
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IMDG: International Maritume Code for Dangerous Goods
DOT: US Department of Transport Association
(ICAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
USDA
VFINS: Workplace Hazardous Materials Information (USA)
NF: National Toxicology Program (USA)