

Safety Data Sheet per OSHA HazCom 2012

		100 011 00/2 1/2010
1	1 Identification	
	Product identifier Product name: 1-Boc-4-piperidinemethanol	
	Stock number: H26650	
	CAS Number:	
	123855-51-6 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: 800-32 <u>2</u> -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) 928-0)789.
2	2 Hazard(s) identification	
	Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) The substance is not classified according to the Globally Harmonized System (GHS).	
	Hazards not otherwise classified No information known.	
	Label elements GHS label elements Not applicable	
	Hazard pictograms Not applicable Signal word Not applicable	
	Hāzard statements Not applicable	
	WHMIS classification Not controlled Classification system	
	HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	
	HEALTH I Health (acute effects) = 1 FIRE I Flammability = 1	
	FRE I REACTIVITY1 Physical Hazard = 1	
	Other hazards Results of PBT and vPvB assessment	
	PBT: Not applicable.	
J	3 Composition/information on ingredients Chemical characterization: Substances	
	CAS# Description: 123855-51-6 1-Boc-4-piperidinemethanol	
4	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 immédiate 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.	
	5 Fire-fighting measures	
6	I FILEBOURDOU DEGNUES	
5		
5	Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.	
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7 Handling and storage Handling Processions (M) and (M) Processions (M)	See Section 8 for information on persona See Section 13 for disposal information.	al protection equipment.	(Contd. of page 1)			
Information about stronge in one common storage facility: Store away from oxidizing agents. Particle Interpretation in the storage conditions: Storage Interpretations: Storage Interpretations: Storage Interpretations: Storage Interpretations: Storage Interpretations: Storage Interpretations: Property operating charmonal turne hood designed for hazardous chanicals and having an average face velocity of at least 100 feet per minute. Control parameters: Mathémation an engronmatics: Control parameters: Provide parameters: Control parameters: Provide parameters: Control parameters: Provide parameters: Control parameters: Provide parameters: Parameters: Provide parameters: Parameters: Parameters: Parameters: Parameters: Parameters: Parameters:	7 Handling and storage Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Information about protection against explosions and fires: No information known. Conditions for safe storage, including any incompatibilities Storage					
Additional information about design of technical systems: Properly operating chemical line hood designed for fizzardous chemicals and having an average face velocity of at least 100 feet per minute. Components with limit values that require monitoring at the workplace: Not required. Adjusted in the intervalues in the intervalues of the morkplace: Not required. Personal protective and hygienic measures The scale protective and hygienic measures The scale protective and hygienic measures The scale and contaminated tothing immediately. Wash hand solves and at the and of work. Protective and hygienic measures The scale and contaminated tothing immediately. Wash hand of suitable dows and a the and of work. Protective gloves prior to each use for their proper condition. The scale dows and a the and of dows. Property opticity dows prior to each use for their proper condition. The scale dows and the and of dows. Property opticity dows prior to each use for their proper condition. The scale dows of scale dows and the dows of dows. Property opticity of gove material (in minutes) Not determined. Body protection: Protective work obtain. Body protection: Protective work obtain. Promition: Solid Morematin and the and obtain properties. <	Information about storage in one comr Further information about storage con Keep container tightly sealed.	Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed.				
Components with limit values that require monitoring at the workplace: Not required. Additional information: No data Exposure controls Exposure Exposure controls Exposure Exp	Additional information about design of Properly operating chemical fume hood d Control parameters	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.				
Penetration time of glove material (in minutes) Not determined Eye protection: Safety glasses Body protection: Protective work clothing. 9 Physical and chemical properties General Information Mormation on basic physical and chemical properties General Information Odor Prime: Point: Solid Odor threshold: Not determined Odor threshold: Not determined Difference Boling point/Boling range: Not determined Sublimation temperature / start: Not determined Banger of explosion: Product determined Auto igniting: Lower: Not determined Lower: Not determined Vapor pressure: Not determined Vapor density	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 solied 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 doves prior to each use for their proper condition					
Information on basic physical and chemical properties General Information Appearance: Solid Odor: Not determined Odor: Not determined Odor: Not determined Odor: Not applicable. Change in condition The second se	Penetration time of glove material (in n Eye protection: Safety glasses Body protection: Protective work clothin	Penetration time of glove material (in minutes) Not determined Eye protection: Safety glasses Body protection: Protective work clothing.				
General Information Solid Appearance: Form: Solid Odor: Not determined Odor Odor: Not determined. Odor Odor: Not determined. Odor Other shold: Not determined. Odor Other shold: Not determined. Odor PH-value: Not determined. Odor Meifing point/Meiling range: Not determined. Image: Not determined. Sublimation temperature: Not determined. Image: Not determined. Ignition temperature: Not determined. Image: Not determined. Janger of explosion: Product does not present an explosion hazard. Explosion limits: Lower: Not determined. Not determined. Vapor pressure: Not determined. Not determined. Vapor pressure: Not determined. Not applicable. Solubility: Not determined. Not applicable. Vapor pressure: Not determined. Not applicable. Solubility: Not applicable. Not applicable. Solubility: Not applicable. Not applicable.						
Odior threshold: Not determined. pH-value: Not applicable. Change in condition Not applicable. Change in condition temperature / start: Not determined Sublimation temperature / start: Not determined Flammability (solid, gaseous) Not determined Genomposition temperature: Not determined Ignition temperature: Not determined Decomposition temperature: Not determined Quever: Not determined Lower: Not determined Upper: Not determined Vapor pressure: Not determined Vapor pressure: Not determined Vapor pressure: Not determined. Vapor density Not det	General Information Appearance: Form:	Solid				
Change in condition Melling point/Melling range: Sublimation temperature / start: Hammability (soling range) T8-82 °C (172-180 °F) Not determined Sublimation temperature / start: Hammability (soling assecus) Not determined Junition temperature: Decomposition temperature: Not determined Not determined Auto igniting: Not determined Not determined Danger of explosion: Explosion limits: Lower: Not determined Not determined Danger of explosion: Explosion limits: Lower: Not determined Not determined Density: Explosion rate: Not determined Not determined Particip or fressure: Not determined Not determined Vapor pressure: Not determined Not determined Relative density Not determined Vapor density: Wot applicable. Solubility in /Miscibility with Not applicable. Not applic	Odor threshold:	Not determined.				
Melfing point/Melting range: 78-82 °C (172-180 °F) Boiling point/Melting range: Not determined Sublimation temperature / start: Not determined Ignition temperature: Not determined Ignition temperature: Not determined Danger of explosion: Product does not present an explosion hazard. Explosion limits: Intermined Lower: Not determined Vapor pressure: Not determined Design of explosion: Product does not present an explosion hazard. Explosion limits: Intermined Lower: Not determined Vapor pressure: Not determined Density: Not determined Vapor density Not determined Relative density Not determined Vapor density Not determined Water: Not determined Viscosity: Not determined Water: Not determined Viscosity: Not applicable. Viscosity: Not applicable. Viscosity: Not applicable. Viscosity: Not further relevant information available. Othe		Not applicable.				
Lower: Not determined Upper: Not determined Vapor pressure: Not determined Density: Not determined Relative density Not determined. Vapor density Not applicable. Evaporation rate Not applicable. Solubility in / Miscibility with Not determined Water: Not determined. Partition coefficient (n-octanol/water): Not determined. Viscosity: dynamic: dynamic: Not applicable. kinematic: Not applicable. other information Not determined. Viscosity: dynamic: dynamic: Not applicable. kinematic: Not applicable. other information No further relevant information available. Other information known. Chemical stability Stable under recommended storage conditions. Chemical stability of hazardous reactions known. Possibility of hazardous reactions known Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Hazardous decomposition available.	Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	Not determined Not determined Not determined Not determined Not determined				
Vapor pressure: Not applicable. Density: Not determined Relative density Not determined. Vapor density Not applicable. Evaporation rate Not applicable. Solubility in / Miscibility with Not applicable. Water: Not determined. Partition coefficient (n-octanol/water): Not determined. Viscosity: dynamic: dynamic: Not applicable. kinematic: Not applicable. Other information Not applicable. Viscosity: dynamic: Not applicable. 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:	Lower:	Not determined				
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:	Vapor pressure: Density: Relative density Vapor density Evaporation rate Solubility in / Miscibility with	Not applicable. Not determined Not determined. Not applicable. Not applicable.				
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Carbon monoxide and carbon dioxide Nitrogen oxides						

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	(Contd. of page 2)			
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: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this mate Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acute	n.			
12 Ecological information				
12 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. 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.				
13 Disposal considerations				
13 Disposal considerations 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) 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 Cod	e Not applicable.			
Transport/Additional information:	Not dangerous according to the above specifications.			
DOT Marine Pollutant (DOT):	No			
15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements Not applicable Hazard pictograms Not applicable Hazard statements Not applicable 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. SARA Section 313 (specific toxic chemical listings) Substance is not listed. Prop 65 - Chemicals known to cause cancer 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, 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, female 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, female Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, fuelos cording 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 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 c				
USAUS				

Product name: 1-Boc-4-piperidinemethanol

Page 4/4 Printing date 11/24/2015 Reviewed on 06/24/2010

(Contd. of page 3)

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:

ID: Réglement 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: International Civil Aviation Organization
ICAO: Ti: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
IMDG: International Civil Aviation of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal dose, 50 percent
VPWs very Persistent and very Bioaccumulative
ACGIH: American Chernental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
IMF: National Toxicology Program (USA)
IATE: International Air and the Administration (USA)
IATE: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)

USA