



	Keviel	wea on 04/02/2015
1	I Identification Product identifier	
	Product name: 4-(4-Methyl-1-piperazinyl)benzeneboronic acidpinacol ester	
	Stock number: H51659 CAS Number:	
	747413-21-4 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 Eisher Scientific Chemicals, Inc. 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	P 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	
	Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable WHMIS classification Not controlled	
	Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	
	HEALTH 1 Health (acute effects) = 1 FIRE 1 Flammability = 1	
	REACTIVITY       Physical Hazard = 1         Other hazards       Results of PBT and vPvB assessment	
	PBT: Not applicable. vPvB: Not applicable.	
3	3 Composition/information on ingredients Chemical characterization: Substances	
	CAS# Description: 747413-21-4 4-(4-Methyl-1-piperazinyl)benzeneboronic acidpinacol ester	
4	l 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.	
5	5 Fire-fighting measures Extinguishing media Suite la extinguishing control Conton disuido, extinguishing pourder or under onco. Fight lower fires with water enguger clockel resistant form	
	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) Boron oxide 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 <b>Environmental precautions:</b> Do not allow product to reach sewage system or any water course.	
	Methods and material for containment and cleaning up: Pick up mechanically. Prevention of secondary hazards: No special measures required. Reference to other sections	
	See Section 7 for information on safe handling	(Contd. on page 2)

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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. 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

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. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Recommended filter device for short term use: Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards. Protection of hands:

Inservious gloves 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. **Eye protection:** Safety glasses **Body protection:** Protective work clothing.

# 9 Physical and chemical properties

Information on basic physical and che General Information Appearance: Form: Color: Odor: Odor: Odor threshold:	emical properties Solid Pale grey 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:	Not determined Not determined Not determined Not determined Not determined Not determined Not determined.
Danger of explosion:	Not determined.
Explosion limits: Lower: Upper: Vapor pressure: Density: Relative density Vapor density Evaporation rate Solubility in / Miscibility with	Not determined Not determined Not applicable. Not determined Not determined. Not applicable. Not applicable.
Water:	Not determined
Partition coefficient (n-octanol/water): Viscosity:	Not determined.
dynamic: kinematic: Other information	Not applicable. Not applicable. 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 Reacts with strong oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide

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Nitrogen oxides Boron oxide	(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: EPA-I: Data are inadequate for an assessment of human carcinogenic potential. 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. Aspiration hazard: No effects known. Subacute 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.		
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 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.		
<b>13 Disposal considerations</b> 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		
UN-Number DOT, ADN, IMDG, IATA	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.	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Coo	le Not applicable.	
Transport/Additional information:		
DOT Marine Pollutant (DOT):	No	
UN "Model Regulation":	-	
15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements Not applicable Hazard statements Not applicable Hazard statements 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. This product is not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL). SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, neale Substance is not listed. Prop 65 - Developmental toxicity, neale Substance is not listed. Information about limitation of use: For use only by technically qualified individuals. Other regulations, limitation of use: For use only by technically qualified individuals. Other regulations according to Article 67 and Annex XVII of the Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulations (EC) No. 1907/2006. REACH) for the manufacturing, placing on the market and use must be observed.		
Substance is not listed.	Ibstance is not listed	
Annex XIV of the REACH Regulations (requiring Authorisation for use) Su	USA (Contd. on page 4)	

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# 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 accoryms: 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 Transportation 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 LD50: Lethal dose, 50 percent VPVB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) MARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

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USA