

Safety Data Sheet per OSHA HazCom 2012

1	Identification
	Product identifier Product name: Quinoline-8-boronic acid pinacol ester
	Stock number: H51698
	CAS Number: 190788-62-6
	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 Email: tech@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)
	The substance is not classified according to the Globally Harmonized System (GHS).
	Hazards not otherwise classified No information known.
	HS label elements 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)
	(Hazardouš Materials Identification System)
	FIRe I Flammability = 1   Reactivity[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:
	190788-62-6 Quinoline-8-boronic acid pinacol ester
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 tréatment. 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 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 Boron oxide Nitrogram oxide (NOv)
	Nitrogen oxides (NOx) Possibly Hydrogen cyanide (HCN) Advice for fireflatere
	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
	Ensure adequate ventilation 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: Pick up mechanically. Provention of concenter becarder by provide the provide the environment without proper governmental permits.
	Prevention of secondary hazards: No special measures required. (Contd. on page 2)

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Reference to other sections		(Contd. of pag
See Section 7 for information on safe ha	andling	
See Section 8 for information on personal See Section 13 for disposal information.	al protection equipment.	
7 Handling and storage		
Handling		
Precautions for safe handling		
Keep container tightly sealed.	contains ro	
Store in cool, dry place in tightly closed of Information about protection against	explosions and fires: No information known.	
Conditions for safe storage, including		
Storage		
	ns and receptacles: No special requirements. Imon storage facility: Store away from oxidizing agents.	
Further information about storage cor	nditions:	
Keep container tightly sealed. Store in cool, dry conditions in well seale	ad containara	
Specific end use(s) No further relevant	t information available.	
8 Exposure controls/personal prote	ection	
Additional information about design of		
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 req Additional information: No data	quire monitoring at the workplace: Not required.	
Exposure controls Personal protective equipment		
General protective and hygienic meas	sures	
The usual precautionary measures for ha Keep away from foodstuffs, beverages a	andling chemicals should be followed. and faed	
Remove all solled and contaminated clot	thing immediately.	
	nd of work	
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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: Carbon monoxide and carbon dioxide Boron oxide Nitrogen oxides Product name: Quinoline-8-boronic acid pinacol ester

Possibly Hydrogen cyanide (HCN)	(Contd. of pag				
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 Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No Specific target organ system toxicity - single exposure: No Specific target organ system toxicity - single exposure: No Subacute to chronic toxicity: No effects known. Subacute to chronic toxicity: No effects known. Subacute to chronic toxicity: Boron affects the central nervous system. Boron poisoning causes coma. The temperature may become subnormal and a scarletina	o effects known.				
<u>_</u>					
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 product or large quantities to reach ground 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.	roper governmental permits.				
42 Diseased 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.					
<b>14 Transport information</b> 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					
Transport/Additional information:	Not dangerous according to the above specifications.				
DOT Marine Pollutant (DOT):	No				
15 Regulatory information Safety, health and environmental regulations/legislation speci GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable National regulations This product is not listed in the U.S. Environmental Protection Age to research and development only. This product must be used by o product must not be used for commercial purposes or in formulatio SARA Section 313 (specific toxic chemical listings) Substance California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed.	ency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restric or directly under the supervision of a technically qualified individual as defined by TSCA. This ons for commercial purposes. e is not listed. listed.				

Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. 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. Substance is not listed. (Control on page 4)

## Product name: Quinoline-8-boronic acid pinacol ester

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.	(Contd. of page 3)
<b>16 Other information</b> Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suit information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.	ability of this product not in
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 Regulation S by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (IACA) ICAO: TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) IMDG: International Maintime Code for Dangerous Goods DOT: US Department of Transport Association IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (Canada) LCSO: Lethal concentration, 50 percent LDSO: Lethal concentration, 50 percent LDSO: Lethal concentration, 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) NTP: National Toxicology Program (USA)	