



Reviewed on C	3/01/2007
1 Identification	
Product identifier	
Product name: 4-Amino-2-chloro-6,7-dimethoxyquinazoline	
Stock number: A14952, L06455 CAS Number:	
23680-84-4 EC number:	
245-821-7 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	
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)	
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	
$\wedge$	
GHS07	
Signal word Warning   Hazard statements   H315 Causes skin irritation.   H319 Causes serious eye irritation.   H319 Causes seriour eye irritation.   H325 May cause respiratory irritation.   Precautionary statements   P261 Avoid breathing dust/fume/gas/mist/vapours/spray.   P280 Wear protective gloves/protective clothing/eye protection/face 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.   P304+P340 IF INHALED; Remove person to fresh air and keep comfortable for breathing.	
P405 Store locked up.	
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification	
D2B - Toxic material causing other toxic effects	
$(\bar{\mathbf{T}})$	
Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	
HEALTH Health (acute effects) = 1   FRE Flammability = 1   REACTIVITY 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:	
23680-84-4 4-Amino-2-chloro-6,7-dimethoxyquinazoline	
Identification number(s): EC number: 245-821-7	
4 First-aid measures	—
Description of first aid measures	
After inhalation Supply fresh air. If required, provide artificial respiration, Keep patient warm,	
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.	on page 2)
	USA USA

## Product name: 4-Amino-2-chloro-6,7-dimethoxyquinazoline

(Contd. of page 1) 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 freatment needed No further relevant information available. 5 Fire-fighting measures Extinguishing media 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 Nitrogen oxides (NOx) Hydrogen chloride (HCI) 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 Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. **Environmental preclations:** Do not allow material to be released to the environment will **Methods and material for containment and cleaning up:** Ensure adequate ventilation. **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

Flash point:

Flammability (solid, gaseous)

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: Not required. Additional information: No data Exposure controls Personal protective equipment rersonal 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. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment 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. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Eve protection: Safety glasses Body protection: Protective work clothing. Impervious gloves 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Flakes . Form: Color: White Odor: Not determined Odor threshold: Not determined pH-value: Not applicable Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 260 °C (500 °F) (dec) Not determined

Not determined

Not applicable Not determined.

(Contd. on page 3)

# Product name: 4-Amino-2-chloro-6,7-dimethoxyquinazoline

Innition tomporature.	Not determined	(Contd. of page 2)		
Ignition temperature: Decomposition temperature: Auto igniting:	Not determined Not determined Not determined.			
Danger of explosion:	Product does not present an explosion hazard.			
Explosion limits: Lower:	Not determined			
Upper: Vapor pressure:	Not determined Not applicable.			
Density: Relative density	Not determined Not determined.			
Vapor density	Not applicable.			
Evaporation rate Solubility in / Miscibility with	Not applicable.			
Water: Partition coefficient (n-octanol/water)	Not determined ): Not determined.			
Viscosity: dynamic:	Not applicable.			
kinematic: Other information	Not applicable. No further relevant information available.			
10 Stability and reactivity				
Reactivity No information known. Chemical stability Stable under recom	mended storage conditions. <b>to be avoided:</b> Decomposition will not occur if used and stored according to specifications.			
Possibility of hazardous reactions No	o dangerous reactions known			
Conditions to avoid No further relevan Incompatible materials: Oxidizing age	nt information available.			
Hazardous decomposition products: Carbon monoxide and carbon dioxide				
Nitrogen oxides Hydrogen chloride (HCI)				
11 Toxicological information Information on toxicological effects				
Acute toxicity: No effects known	a and an and a			
LD/LC50 values that are relevant for on Skin irritation or corrosion: Causes sh	kin irritation.			
Eye irritation or corrosion: Causes se Sensitization: No sensitizing effects kno	erious eye irritation.			
Germ cell mutagenicity: No effects kni	own. own. a on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.			
<b>Reproductive toxicity:</b> No effects know	wn.			
Specific target organ system toxicity Specific target organ system toxicity	r <b>- repeated exposure:</b> No effects known. r <b>- single exposure:</b> May cause respiratory irritation.			
Aspiration hazard: No effects known.				
Additional toxicological information:	cts known. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.			
12 Ecological information				
Toxicity	formation quailabla			
Aquatic toxicity: No further relevant inf Persistence and degradability No furth	ther relevant information available.			
Bioaccumulative potential No further r Mobility in soil No further relevant infor	relevant information available. rmation 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 assessmen				
PBT: Not applicable				
vPvB: Not applicable. Other adverse effects No further releva	ant information available.			
13 Disposal considerations				
Waste treatment methods	or national regulations to ensure proper disposal.			
Uncleaned packagings:				
Recommendation: Disposal must be m				
<b>14 Transport information</b> Not a hazardous material for transportat	tion.			
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, IMĎG, IÀTA Environmental hazards:	None Not applicable.			
Special precautions for user	Not applicable.			
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Transport in bulk according to Annex II of MARPOL73/	
Transport/Additional information:	Not dangerous according to the above specifications.
DOT Marine Pollutant (DOT):	No
Regulatory information	
Safety, health and environmental regulations/legislatio GHS label elements The product is classified and labeled Hazard pictograms	<b>In specific for the substance or mixture</b> I in accordance with 29 CFR 1910 (OSHA HCS)
GHS07	
Signal word Warning Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements P261 Avoid breathing dust/fume/gas/mist/vap P280 Wear protective gloves/protective cloth P305+P351+P338 IF IN EYES: Rinse cautiously with wate P304+P340 IF INHALED: Remove person to fresh a	pours/spray. ing/eye protection/face protection. er for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. air and keep comfortable for breathing.
P405 Store locked up.	dance with local/regional/national/international regulations.
<b>National regulations</b> This product is not listed in the U.S. Environmental Protect	tion Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restrives a set of the supervision of a technically qualified individual as defined by TSCA. This supervisions for commercial purposes.
Prop 65 - Chemicals known to cause cancer Substance Prop 65 - Developmental toxicity Substance is not listed Prop 65 - Developmental toxicity, female Substance is no Prop 65 - Developmental toxicity, male Substance is no Information about limitation of use: For use only by tech	l. not listed.
Other regulations, limitations and prohibitive regulatio Substance of Very High Concern (SVHC) according to The conditions of restrictions according to Article 67 a market and use must be observed.	ns the REACH Regulations (EC) No. 1907/2006. Substance is not listed. and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on
Substance is not listed. Annex XIV of the REACH Regulations (requiring Autho Chemical safety assessment: A Chemical Safety Assess	risation for use) Substance is not listed. sment has not been carried out.
information to ensure proper use and protect the health an	ent to other information gathered by them, and should make independent judgement of suitability of this ad safety of employees. This information is furnished without warranty, and any use of the product not i mbination 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: IMDC: International Maritime Code for Dangerous Goods DDT: US Department of Transportation	
ENECS: European Inventory of Existing Commercial Chemical Substances ENECS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Heazardous Materials (dentification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LCSD: Lethal concentration, 50 percent	)
LDSU: 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) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	
EPA: Environmental Protection Agency (USA)	