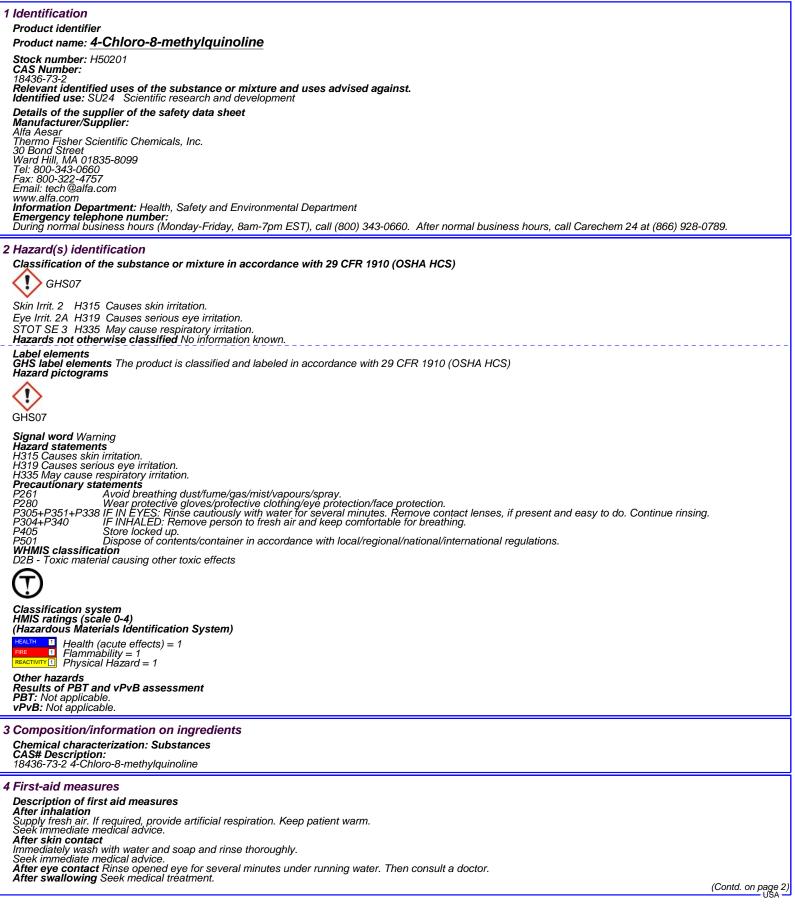


Safety Data Sheet per OSHA HazCom 2012



| | Nove, | 100/2001 | |
|---|---|--------------------|--|
| Product name: 4-Chloro-8-methylqu | inoline | | |
| Information for doctor | | (Contd. of page 1) | |
| Most important symptoms and effects | s, both acute and delayed No further relevant information available. attention and special treatment needed No further relevant information available. | | |
| | | | |
| 5 Fire-fighting measures Extinguishing media Suitable extinguishing agents Carbon Special hazards arising from the subs If this product is involved in a fire, the for 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. | dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. stance or mixture llowing can be released: | | |
| 6 Accidental release measures | | | |
| O 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. 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 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. 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. Store in cool, dry conditions in well sealed containers. Specific end use(s) No further relevant information available. | | | |
| Specific end use(s) No further relevant information available. | | | |
| Control parameters Components with limit values that red Additional information: No data Exposure controls Personal protective equipment General protective and hygienic meas The usual precautionary measures for h Keep away from foodstuffs, beverages a Remove all soiled and contaminated clo Wash hands before breaks and at the er Avoid contact with the eyes and skin. Maintain an ergonomically appropriate w Breathing equipment: Use suitable res Protection of hands: | of technical systems: designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. quire monitoring at the workplace: Not required. sures andling chemicals should be followed. and feed. thing immediately. | | |
| The selection of suitable gloves not only Penetration time of glove material (in | depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. | | |
| Eye protection: Safety glasses Body protection: Protective work clothi | | | |
| | • | | |
| 9 Physical and chemical properties Information on basic physical and che | | | |
| General Information Appearance: | | | |
| Form: Odor: | Crystalline powder Not determined | | |
| Odor threshold: pH-value: | Not determined. Not applicable. | | |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: | Not applicable. Not determined Not determined Not determined | | |
| Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: | Not determined Not applicable Not determined Not determined Not determined | | |
| | | (Contd. on page 3) | |
| | | | |

Product name: 4-Chloro-8-methylauinoline

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| Product name: 4-Chloro-8-methylqu | | /lewed on 01/05/2007 | |
|--|--|----------------------|--|
| | | (Contd. of page 2) | |
| Auto igniting: | Not determined. | | |
| Danger of explosion: Explosion limits: | Product does not present an explosion hazard. | | |
| Lower: | Not determined | | |
| Upper: Vapor pressure: | Not determined Not applicable. | | |
| Density: | Not determined | | |
| Relative density Vapor density | Not determined. Not applicable. | | |
| Evaporation rate Solubility in / Miscibility with | Not applicable. | | |
| Water: | Not determined | | |
| Partition coefficient (n-octanol/water) Viscosity: | | | |
| dynamic: kinematic: | Not applicable. 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: Carbon monoxide and carbon dioxide Nitrogen oxides Hydrogen chloride (HCI) | | | |
| 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: Causes skin irritation. Eye irritation or corrosion: Causes serious eye irritation. Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No effects known. Carcinogenicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: May cause respiratory irritation. 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. | | | |
| | r relevant information available. r relevant information available. ormation available. o the environment without proper governmental permits. o quantities to reach ground water, water course or sewage system. ont | | |
| 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 | ation. | | |
| 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 Annea | ex II of MARPOL73/78 and the IBC Code Not applicable. | (Contd. on page 4) | |
| | | USA - | |

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| Product name: 4-Chloro-8-methylquinoline | | |
|--|--|--|
| | (Contd. of page 3) | |
| Transport/Additional information: | Not dangerous according to the above specifications. | |
| DOT Marine Pollutant (DOT): | No | |
| 15 Regulatory information Safety, health and environmental regulations/legislation spe GHS label elements The product is classified and labeled in ac Hazard pictograms | | |
| P405 Store locked up. P501 Dispose of contents/container in accordance National regulations This product is not listed in the U.S. Environmental Protection A to research and development only. This product must be used for commercial purposes or in formula SARA Section 313 (specific toxic chemical listings) Substan California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not 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 technical Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the R | ice is not listed. ot listed. ted. d. | |
| market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisati Chemical safety assessment: A Chemical Safety Assessment | i on for use) Substance is not listed. Thas not been carried out. | |
| information to ensure proper use and protect the health and safe | other information gathered by them, and should make independent judgement of suitability of this ety of employees. This information is furnished without warranty, and any use of the product not in ation with any other product or process, is the responsibility of the user. | |
| Department issuing SDE: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association 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 UD50: Lethal dose, 50 percent VPWE very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Agency for Research on Cancer EPA: Environmental Protection Agency (USA) | | |

USA ____