

Date of issue: 2023/5/8 Date of revision: -

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking Product identifier: Product name: 1-(tert-Butoxycarbonyl)-4-(2-chlorophenyl)piperidine-4-carboxylic acid Product code (SDS NO): PK03248E-1 Relevant identified uses of the substance or mixture and uses advised against Research and Development Details of the supplier of the safety data sheet Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD. Address: 3-1, Honmachibashi, Chuo-ku,Osaka, JAPAN **Division: Chemical Safety Management Department** Telephone number: +81-6-6946-8061 FAX: +81-6-6946-1607 2. Hazards identification GHS classification and label elements of the product Classification of the substance or mixture (Note) GHS classification without description: Not classified/Classification not possible Label elements No GHS label element No Signal word 3. Composition/information on ingredients Mixture/Substance selection: Substance Ingredient name: 1-(tert-Butoxycarbonyl)-4-(2-chlorophenyl)piperidine-4-carboxylic acid Content (%): -Chemical formula: C17H22CINO4 CAS No.: 1146894-87-2 MW: 339.81 4. First-aid measures Descriptions of first-aid measures IF INHALED Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN (or hair) Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures	
Extinguishing media	
Suitable extinguishing media	
Use appropriate extinguishing media suitable for surrounding facilities.	
Unsuitable extinguishing media data is not available.	
Advice for firefighters	
Specific fire-fighting measures	
Evacuate non-essential personnel to safe area.	
Special protective equipment and precautions for fire-fighters	
Wear fire/flame resistant/retardant clothing.	
Wear protective gloves/protective clothing/eye protection/face protection.	
Firefighters should wear self-contained breathing apparatus with full face peace operated	
positive pressure mode.	
6. Accidental release measures	
Personnel precautions, protective equipment and emergency procedures	
Ventilate area until material pick up is complete.	
Wear proper protective equipment. Environmental precautions	
Prevent spills from entering sewers, watercourses or low areas.	
Methods and materials for containment and cleaning up	
Sweep up, place in a bag and hold for waste disposal.	
Preventive measures for secondary accident	
Collect spillage.	
7. Handling and storage	
Precautions for safe handling	
Preventive measures	
(Protective measures against fire and explosion)	
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.	
(Exhaust/ventilator)	
Exhaust/ventilator should be available.	
(Safety treatments)	
Avoid contact with skin.	
Avoid contact with eyes.	
Safety Measures	
Wear protective gloves, protective clothing or face protection.	
When using do not eat, drink or smoke.	
Any incompatibilities	
See "10.Stability and Reactivity"	
Storage	
Keep container tightly closed.	
Store in a cool, dry place. Do not store in direct sunlight.	
Container and packaging materials for safe handling	
Glass.	

8. Exposure controls/personal protection Exposure controls Appropriate engineering controls



PK03248E-1, 2023/5/8 Do not use in areas without adequate ventilation. Eye wash station should be available. Washing facilities should be available. Individual protection measures Respiratory protection Wear respiratory protection. Hand protection Wear protective gloves. Eye protection

Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties Physical state, Color: pink solid. Odor is not available. Melting point/Freezing point data is not available. Boiling point or initial boiling point data is not available. Boiling range data is not available. Flammability (gases, liquids and solids) data is not available. Lower and upper explosion limit/flammability limit data is not available. Flash point data is not available. Auto-ignition temperature data is not available. Decomposition temperature data is not available. pH data is not available. Kinematic viscosity data is not available. Solubility: Solubility in water data is not available. n-Octanol/water partition coefficient data is not available. Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

No Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity

N.A. Chemical stability Stable under normal storage/handling conditions. Possibility of hazardous reactions N.A. Conditions to avoid Contact with incompatible materials. Contact with fire source. Incompatible materials Strong oxidizing agents Hazardous decomposition products

Carbon oxides, Nitrogen oxides, Chlorine, Hydrogen chloride

 Toxicological Information Information on toxicological effects Acute toxicity data is not available.



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Irritant properties Skin corrosion/irritation data is not available. Serious eye damage/irritation data is not available. Allergenic and sensitizing effects data is not available. Mutagenic effects data is not available. Carcinogenic effects data is not available. Reproductive toxicity data is not available. STOT STOT-single exposure data is not available. STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

12. Ecological Information

Ecotoxicity

Ecotoxicity data is not available. Persistence and degradability Persistence and degradability data is not available. Bioaccumulative potential Bioaccumulative potential data is not available. Mobility in soil Mobility in soil data is not available. Other adverse effects Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

Not applicable to UN No., UN CLASS Not applicable to IMDG Code Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex III – Prevention of pollution by harmful substances Marine pollutants (yes/no) : no

15. Regulatory Information

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

The product is not applicable to GHS classifications.

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18)



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IATA Dangerous Goods Regulations (62th Edition) 2021 2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2021 TLVs and BEIs. (ACGIH) Supplier's data/information

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2020).