

Date of issue: 2016/8/23 Date of revision: 2022/2/3

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking Product identifier: Product name: 1-(tert-Butoxycarbonyl)-4-(3-chlorophenyl)piperidine-4-carboxylic acid Product code (SDS NO): PK03153E-2 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 e-mail address: kagakuhinanzenkanri@kishida.co.jp 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-(3-chlorophenyl)piperidine-4-carboxylic acid Content (%): -Chemical formula: C17H22CINO4 CAS No.: 1001124-90-8 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

Do not use in areas without adequate ventilation.



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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.
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9. Physical and Chemical Properties
Information on basic physical and chemical properties Physical state, Color: white 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

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



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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-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

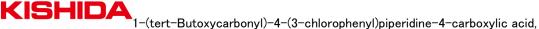
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

The product is not applicable to GHS classifications.

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (61th Edition) 2020



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Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2020 TLVs and BEIs. (ACGIH)

http://monographs.iarc.fr/ENG/Classification/index.php

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 2018).