

SAFETY DATA SHEET

Creation Date 19-Sep-2014 Revision Date 19-Jan-2015 Revision Number 1

1. Identification

Product Name 4-(4-Methylperhydro-1,4-diazepin-1-yl)benzoic acid hydrochloride

hydrate

Cat No.: CC60351CB; CC60351DA; CC60351ZZ

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company Emergency Telephone Number

 Maybridge
 For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11

 Thermo Fisher Scientific
 Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99

 Bishop Meadow Rd
 CHEMTREC Tel. No.US:001-800-424-9300 / Europe:001-703-527-3887

Loughborough, Leicestershire, Great Britain

LE115RG

Tel: 01509 231166

Website: www.maybridge.com

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity

Acute dermal toxicity

Acute Inhalation Toxicity - Dusts and Mists

Skin Corrosion/irritation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity (single exposure)

Target Organs - Respiratory system.

Label Elements

Signal Word

Warning

Hazard Statements

Harmful if swallowed Harmful in contact with skin Harmful if inhaled Causes skin irritation Causes serious eye irritation May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Response

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

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

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

Skin

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

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

Eves

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

Ingestion

Rinse mouth

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition / information on ingredients

Component	CAS-No	Weight %
1H-Benzimidazole-2-carboxylic acid	303134-03-4	100

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

Inhalation Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. Do

not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is

required.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

Most important symptoms/effects **Notes to Physician**

No information available. Treat symptomatically

5. Fire-fighting measures

Water spray. Carbon dioxide (CO₂). Dry chemical, chemical foam. Suitable Extinguishing Media

No information available **Unsuitable Extinguishing Media**

Flash Point No information available Method -No information available

Autoignition Temperature

Explosion Limits

No information available

Upper No data available Lower No data available Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Hydrogen chloride gas Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO2)

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health **Flammability** Instability Physical hazards 2 0 N/A 1

Accidental release measures

Personal Precautions Environmental Precautions Ensure adequate ventilation. Use personal protective equipment.

See Section 12 for additional ecological information.

Up

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment. Avoid dust formation. Use spark-proof tools and

explosion-proof equipment.

7. Handling and storage

Handling Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin

and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Do not ingest.

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Storage

8. Exposure controls / personal protection

This product does not contain any hazardous materials with occupational exposure limits **Exposure Guidelines**

established by the region specific regulatory bodies.

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations **Engineering Measures**

and safety showers are close to the workstation location.

Personal Protective Equipment

Wear appropriate protective eyeglasses or chemical safety goggles as described by **Eye/face Protection**

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard **Respiratory Protection**

> EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures**

9. Physical and chemical properties

Physical State Solid White **Appearance**

Odor No information available **Odor Threshold** No information available No information available Ha

Melting Point/Range 239 - 241 °C / 462.2 - 465.8 °F

Boiling Point/Range No information available Flash Point No information available **Evaporation Rate** No information available Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available No data available Lower

Vapor Pressure No information available Vapor Density No information available **Relative Density** No information available Solubility No information available

Partition coefficient; n-octanol/water No data available

Autoignition Temperature No information available No information available **Decomposition Temperature Viscosity** No information available

C13 H18 N2 O2 . H CI . H2 O **Molecular Formula**

Molecular Weight 288.78

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents, Strong bases, Amines, Strong reducing agents

Hazardous Decomposition Products Hydrogen chloride gas, Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide

(CO₂)

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product

4-(4-Methylperhydro-1,4-diazepin-1-yl)benzoic acid hydrochloride hydrate

Component Information

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
1H-Benzimidazole-2-c	303134-03-4	Not listed				
arboxylic acid						

Mutagenic Effects No information available

No information available. **Reproductive Effects**

No information available. **Developmental Effects**

Teratogenicity No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

No information available **Aspiration hazard**

Symptoms / effects, both acute and No information available

delayed

Endocrine Disruptor Information No information available

The toxicological properties have not been fully investigated. Other Adverse Effects

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability **Bioaccumulation/ Accumulation**

No information available No information available.

No information available. Mobility

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

(4-(4-METHYLPERHYDRO-1,4-DIAZEPIN-1-YL)BENZOIC ACID HYDROCHLORIDE Proper technical name

HYDRATE)

Hazard Class 6.1 **Packing Group** Ш

TDG

UN-No UN2811

TOXIC SOLID, ORGANIC, N.O.S. **Proper Shipping Name**

4-(4-Methylperhydro-1,4-diazepin-1-yl)benzoic acid hydrochloride hydrate

Hazard Class 6.1 Packing Group

<u>IATA</u>

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class 6.1 Packing Group III

IMDG/IMO

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class 6.1 Packing Group III

15. Regulatory information

International Inventories

Legend:

X - Listed

- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazardous Categorization

Acute Health HazardYesChronic Health HazardNoFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

Clean Water Act Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration

Not applicable

CERCLANot applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

State Right-to-Know Not applicable

U.S. Department of Transportation

4-(4-Methylperhydro-1,4-diazepin-1-yl)benzoic acid hydrochloride hydrate

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

D1B Toxic materials

D2B Toxic materials



16. Other information

Prepared By Regulatory Affairs

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS