

1. Product and Company Identification

Product Code: 14082

Product Name: MT-45 (hydrochloride)

Company Name: Cayman Chemical Company
1180 E. Ellsworth Rd.
Ann Arbor, MI 48108

Web site address: www.caymanchem.com

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300
CHEMTREC Outside USA and Canada: +1 (703)527-3887

Information: Cayman Chemical Company +1 (734)971-3335

Intended Use: For research use only, not for human or veterinary use.

Synonyms: 1-cyclohexyl-4-(1,2-diphenylethyl)-piperazine, dihydrochloride; NSC 299236; I-C6;

2. Hazards Identification

Acute Toxicity: Oral, Category 3
Aquatic Toxicity (Acute), Category 1
Aquatic Toxicity (Chronic), Category 1



GHS Signal Word: **Danger**

GHS Hazard Phrases: H301: Toxic if swallowed.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

GHS Precaution Phrases: P264: Wash {hands} thoroughly after handling.
P273: Avoid release to the environment.

GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P330: Rinse mouth.
P391: Collect spillage.

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

Emergency Overview:

Potential Health Effects (Acute and Chronic): Material may be irritating to the mucous membranes and upper respiratory tract.
May be harmful by inhalation or skin absorption.
May cause eye, skin, or respiratory system irritation.
Toxic if swallowed.
Very toxic to aquatic life with long lasting effects.
To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration	RTECS #
57314-55-3	MT-45 (hydrochloride)	100.0 %	TL3486500

4. First Aid Measures

Emergency and First Aid
Procedures:

In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
In Case of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.
In Case of Ingestion:	Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

5. Fire Fighting Measures

Flash Pt:	No data.
Explosive Limits:	LEL: No data. UEL: No data.
Autoignition Pt:	No data.
Suitable Extinguishing Media:	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.
Unsuitable Extinguishing Media:	A solid water stream may be inefficient.
Fire Fighting Instructions:	As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.
Flammable Properties and Hazards:	No data available.
Hazardous Combustion	No data available.
Products:	

6. Accidental Release Measures

Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation.
Protective Equipment and	As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,
Emergency Procedures:	and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
Environmental Precautions:	Take steps to avoid release into the environment, if safe to do so.
Steps To Be Taken In Case	Contain spill and collect, as appropriate.
Material Is Released Or Spilled:	Transfer to a chemical waste container for disposal in accordance with local regulations.

7. Handling and Storage

Precautions To Be Taken in	Avoid breathing dust/fume/gas/mist/vapours/spray.
Handling:	Avoid prolonged or repeated exposure.
Precautions To Be Taken in	Keep container tightly closed.
Storing:	Store in accordance with information listed on the product insert.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
57314-55-3	MT-45 (hydrochloride)	No data.	No data.	No data.

Respiratory Equipment (Specify Type):	NIOSH approved respirator, as conditions warrant.
Eye Protection:	Safety glasses
Protective Gloves:	Compatible chemical-resistant gloves
Other Protective Clothing:	Lab coat
Engineering Controls (Ventilation etc.):	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
Work/Hygienic/Maintenance Practices:	Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower. Wash thoroughly after handling.

9. Physical and Chemical Properties

Physical States:	☐ Gas ☐ Liquid ☒ Solid
Appearance and Odor:	A neat solid
pH:	No data.
Melting Point:	No data.
Boiling Point:	No data.
Flash Pt:	No data.
Evaporation Rate:	No data.
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Specific Gravity (Water = 1):	No data.
Solubility in Water:	No data.
Solubility Notes:	Soluble in: chloroform;
Octanol/Water Partition Coefficient:	No data.
Autoignition Pt:	No data.
Decomposition Temperature:	No data.
Viscosity:	No data.
Molecular Formula & Weight:	C ₂₄ H ₃₂ N ₂ • 2HCl 421.5

10. Stability and Reactivity

Stability:	Unstable ☐ Stable ☒
Conditions To Avoid:	No data available.
Incompatibility - Materials To Avoid:	strong oxidizing agents
Hazardous Decomposition or Byproducts:	No data available.
Polymerization:	Will occur ☐ Will not occur ☒
Stability Note(s):	Stable if stored in accordance with information listed on the product insert.

11. Toxicological Information

Toxicological Information: The toxicological effects of this product have not been thoroughly studied.
MT-45 (hydrochloride) - Toxicity Data: Oral LD50 (rat): 150 mg/kg; Subcutaneous LD50 (rat): 136 mg/kg; Oral LD50 (mouse): 329 mg/kg; Intraperitoneal LD50 (mouse): 58.4 mg/kg; Subcutaneous LD50 (mouse): 743 mg/kg;

Chronic Toxicological Effects: MT-45 (hydrochloride) - Investigated as a drug.
Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.
See actual entry in RTECS for complete information.
MT-45 (hydrochloride) RTECS Number: TL3486500

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
57314-55-3	MT-45 (hydrochloride)	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

General Ecological Information: Avoid release into the environment.
Runoff from fire control or dilution water may cause pollution.

13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Toxic solid, organic, n.o.s. (MT-45 (hydrochloride))
DOT Hazard Class: 6.1 POISON
UN/NA Number: UN2811 **Packing Group:** III



LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Toxic solid, organic, n.o.s. (MT-45 (hydrochloride))

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Toxic solid, organic, n.o.s. (MT-45 (hydrochloride))
UN Number: 2811 **Packing Group:** III
Hazard Class: 6.1 - POISON **IATA Classification:** 6.1

Additional Transport Information: Transport in accordance with local, state, and federal regulations.
When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10.
Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
57314-55-3	MT-45 (hydrochloride)	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
57314-55-3	MT-45 (hydrochloride)	CAA HAP, ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No



SAFETY DATA SHEET

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Revision: 04/24/2018

Supersedes Revision: 12/10/2013

Regulatory Information

Statement:

This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.

16. Other Information

Revision Date:

04/24/2018

Additional Information About

No data available.

This Product:

Company Policy or Disclaimer:

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.