

## 1. Product and Company Identification

**Product Code:** 11639

**Product Name:** Methylphenidate (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:** .alpha.-phenyl-2-piperidineacetic acid, methyl ester, monohydrochloride; Concerta; Medikinet; NSC 169868; Ritalin;

## 2. Hazards Identification

**Acute Toxicity: Oral, Category 4**  
**Respiratory Sensitization, Category 1**  
**Skin Sensitization, Category 1**  
**Germ Cell Mutagenicity, Category 2**  
**Specific Target Organ Toxicity (single exposure), Category 3**



**GHS Signal Word:** **Danger**

**GHS Hazard Phrases:** H302: Harmful if swallowed.  
 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled  
 H317: May cause an allergic skin reaction  
 H341: Suspected of causing genetic defects  
 H335: May cause respiratory irritation.

**GHS Precaution Phrases:** P264: Wash hands thoroughly after handling.  
 P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P272: Contaminated work clothing should not be allowed out of the workplace.  
 P280: Wear protective gloves/clothing and eye/face protection as specified by the manufacturer/supplier or the competent authority.  
 P201: Obtain special instructions before use.  
 P202: Do not handle until all safety precautions have been read and understood.  
 P281: Use personal protective equipment as required.

**GHS Response Phrases:** P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
 P330: Rinse mouth.  
 P304+341: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.  
 P342+311: If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.  
 P302+352: IF ON SKIN: Wash with plenty of soap and water.  
 P333+313: If skin irritation or rash occurs, seek medical advice/attention.  
 P363: Wash contaminated clothing before reuse.  
 P308+313: IF exposed or concerned: Get medical attention/advice.  
 P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.  
 P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

**Phrases:**

**Potential Health Effects (Acute and Chronic):**

- Causes respiratory tract irritation.
- Harmful if swallowed.
- Material is irritating to the mucous membranes and upper respiratory tract.
- May be harmful by inhalation or skin absorption.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause an allergic skin reaction.
- May cause eye or skin irritation.
- Suspected of causing genetic defects.

### 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration	RTECS #
298-59-9	Methylphenidate (hydrochloride)	100.0 %	TM3850000

### 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 20 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 20 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.

**Signs and Symptoms Of Exposure:** To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

### 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.

No data available.



<b>Percent Volatile:</b>	No data.
<b>Autoignition Pt:</b>	No data.
<b>Molecular Formula &amp; Weight:</b>	C <sub>14</sub> H <sub>19</sub> NO <sub>2</sub> • HCl      269.8

## 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ ]      Stable [ X ]
<b>Conditions To Avoid:</b>	No data available.
<b>Incompatibility - Materials To Avoid:</b>	No data available.
<b>Hazardous Decomposition or Byproducts:</b>	No data available.
<b>Polymerization:</b>	Will occur [ ]      Will not occur [ X ]
<b>Stability Note(s):</b>	Stable if stored in accordance with information listed on the product insert.

## 11. Toxicological Information

<b>Toxicological Information:</b>	The toxicological effects of this product have not been thoroughly studied.
<b>Chronic Toxicological Effects:</b>	<p>Methylphenidate (hydrochloride) - Toxicity Data: Oral LD50 (rat): 350 mg/kg; Oral LD50 (rabbit): 900 mg/kg;</p> <p>Methylphenidate (hydrochloride) - Investigated as a mutagen, reproductive effector, and tumorigen. Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.</p> <p>Methylphenidate (hydrochloride) RTECS Number: TM3850000</p>

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
298-59-9	Methylphenidate (hydrochloride)	n.a.	n.a.	n.a.	n.a.

## 12. Ecological Information

<b>General Ecological Information:</b>	<p>Avoid release into the environment.</p> <p>Runoff from fire control or dilution water may cause pollution.</p>
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## 13. Disposal Considerations

<b>Waste Disposal Method:</b>	Dispose in accordance with local, state, and federal regulations.
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## 14. Transport Information

<b>LAND TRANSPORT (US DOT):</b>	
DOT Proper Shipping Name:	Not dangerous goods.
DOT Hazard Class:	
UN/NA Number:	
<b>LAND TRANSPORT (European ADR/RID):</b>	
ADR/RID Shipping Name:	Not dangerous goods.
UN Number:	
Hazard Class:	
<b>AIR TRANSPORT (ICAO/IATA):</b>	
ICAO/IATA Shipping Name:	Not dangerous goods.
<b>Additional Transport Information:</b>	Transport in accordance with local, state, and federal regulations.



# SAFETY DATA SHEET

## Methylphenidate (hydrochloride)

Revision: 03/03/2016  
Supersedes Revision: 02/06/2013

### 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)
298-59-9	Methylphenidate (hydrochloride)	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
298-59-9	Methylphenidate (hydrochloride)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No

**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:** 03/03/2016

**Additional Information About This Product:** No data available.

**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.