SAFETY DATA SHEET

Preparation Date: No data available
Revision Date: 04/08/2015
Revision Number: G1

Product identifier

Product code: HP492
Product Name: CHLOROBENZENE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE

Other means of identification

Synonyms: Monochlorobenzene
CAS #: 108-90-7
RTECS #: CZ0175000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against: No information available

Supplier:
Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number: Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

---

2. HAZARDs IDENTIFICATION

Classification

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

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Acute toxicity - Oral</th>
<th>Acute toxicity - Inhalation (Gases)</th>
<th>Acute toxicity - Inhalation (Dusts/Mists)</th>
<th>Skin corrosion/irritation</th>
<th>Specific target organ toxicity (single exposure)</th>
<th>Flammable liquids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Category 4</td>
<td>Category 4</td>
<td>Category 4</td>
<td>Category 2</td>
<td>Category 3</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

Label elements
Warning

Hazard statements
Harmful if swallowed
Harmful if inhaled
Causes skin irritation
May cause respiratory irritation. May cause drowsiness or dizziness
Flammable liquid and vapor

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
Very toxic to aquatic life with long lasting effects
Very toxic to aquatic life

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/.? /equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
Specific treatment (see .? on this label)
In case of fire: Use CO2, dry chemical, or foam to extinguish.
If skin irritation occurs: Get medical advice/attention
If ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse
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.
If SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage
Store in a well-ventilated place. Keep container tightly closed
Store locked up

Product code: HP492
Product name: CHLOROBENZENE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene</td>
<td>108-90-7</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures
General Advice: Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed
Notes to Physician: Treat symptomatically

Protection of first-aiders
First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media
Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Alcohol-resistant foam. Water spray.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
Hazardous Combustion Products: Carbon oxides

Product code: HP492  Product name: CHLOROBENZENE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
Specific hazards:
- Flammable
- May be ignited by heat, sparks or flames
- Container explosion may occur under fire conditions or when heated
- Vapor may travel considerable distance to source of ignition and flash back
- Vapors may form explosive mixtures with air
- Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks)

Special Protective Actions for Firefighters

Specific Methods:
- Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the material.

Special Protective Equipment for Firefighters:
- As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:
- Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions
- Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment
- Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up
- Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Technical Measures/Precautions:
- Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Safe Handling Advice:
- Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Product code: HP492
Product name: CHLOROBENZENE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition.

Incompatible Materials:
No special restrictions on storage with other products

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>United States</th>
<th>Canada</th>
<th>Australia</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene - 108-90-7</td>
<td>75 ppm TWA</td>
<td>= 10 ppm TWA</td>
<td>46 mg/m³ TWA</td>
<td>= 350 mg/m³ TWA</td>
</tr>
<tr>
<td></td>
<td>350 mg/m³ TWA</td>
<td>= 46 mg/m³ TWA</td>
<td>= 10 ppm TWA</td>
<td>= 75 ppm TWA</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles. Safety glasses with side-shields.

Skin and body protection: Chemical resistant apron. Gloves. Long sleeved clothing.

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Product code: HP492
Product name: CHLOROBENZENE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Almond-like.</td>
</tr>
<tr>
<td>Taste</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular/Formula weight</td>
<td>112.56</td>
</tr>
<tr>
<td>Formula</td>
<td>C₆H₅Cl</td>
</tr>
<tr>
<td>Flash point (°C):</td>
<td>No data available</td>
</tr>
<tr>
<td>Flashpoint (°C/F):</td>
<td>29.44°C/85°F</td>
</tr>
<tr>
<td>Autoignition Temperature (°C/F):</td>
<td>638°C/1180.4°F</td>
</tr>
<tr>
<td>Boiling point/range(°C/F):</td>
<td>132°C/269.6°F</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.1058</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold (ppm):</td>
<td>0.2</td>
</tr>
<tr>
<td>Miscibility</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in diethyl ether</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless</td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Density (g/cm³):</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point Tested according to</td>
<td>Closed cup</td>
</tr>
<tr>
<td>Lower Explosion Limit (%):</td>
<td>1.3</td>
</tr>
<tr>
<td>Upper Explosion Limit (%):</td>
<td>7.1</td>
</tr>
<tr>
<td>Decomposition temperature(°C/F):</td>
<td>No information available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
</tr>
<tr>
<td>Density (g/cm³):</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor pressure @ 20°C (kPa):</td>
<td>8.8 mmHg</td>
</tr>
<tr>
<td>Vapor density</td>
<td>3.88</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
</tr>
<tr>
<td>Miscibility</td>
<td>No information available</td>
</tr>
<tr>
<td>Miscibility</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in Methanol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Very slightly soluble in cold water</td>
</tr>
<tr>
<td>Melting point/range(°C/F):</td>
<td>-45.6°C/(-50.1°F)</td>
</tr>
<tr>
<td>Autoignition Temperature (°C/F):</td>
<td>638°C/1180.4°F</td>
</tr>
<tr>
<td>Boiling point/range(°C/F):</td>
<td>132°C/269.6°F</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.1058</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold (ppm):</td>
<td>0.2</td>
</tr>
<tr>
<td>Miscibility</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in diethyl ether</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in Methanol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Very slightly soluble in cold water</td>
</tr>
<tr>
<td>Melting point/range(°C/F):</td>
<td>-45.6°C/(-50.1°F)</td>
</tr>
<tr>
<td>Autoignition Temperature (°C/F):</td>
<td>638°C/1180.4°F</td>
</tr>
<tr>
<td>Boiling point/range(°C/F):</td>
<td>132°C/269.6°F</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.1058</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold (ppm):</td>
<td>0.2</td>
</tr>
<tr>
<td>Miscibility</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in diethyl ether</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in Methanol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Very slightly soluble in cold water</td>
</tr>
<tr>
<td>Melting point/range(°C/F):</td>
<td>-45.6°C/(-50.1°F)</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
No information available

Chemical stability
Stability: Stable under recommended storage conditions
Possibility of Hazardous Reactions: Hazardous polymerization does not occur
Incompatible Materials: No information available
Hazardous decomposition products: Carbon oxides.

Other Information
Corrosivity: No information available
Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Product code: HP492
Product name: CHLOROBENZENE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Eyes. Ingestion. Inhalation. Skin.

Acute Toxicity

Component Information

Chlorobenzene - 108-90-7

LD50/oral/rat = 2914 mg/kg Oral LD50 Rat
LD50/oral/mouse = 2300 mg/kg Oral LD50 Mouse
LD50/dermal/rat = No information available
LD50/dermal/rabbit = >7940 mg/kg Skin LD50 Rabbit
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 1110mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = 2300mg/kg

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = >7940mg/kg

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin irritation.

Eye Contact: May cause eye irritation.

Inhalation Harmful by inhalation. May cause respiratory irritation.

Ingestion Harmful if swallowed.

Aspiration hazard No information available

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

Product code: HP492 Product name: CHLOROBENZENE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
Chronic Toxicity  No information available
Sensitization:  No information available
Mutagenic Effects:  No information available
Carcinogenic effects:  Not considered carcinogenic

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH - Carcinogens</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene</td>
<td>A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Reproductive toxicity  No data is available
Reproductive Effects:  No information available
Developmental Effects:  No information available
Teratogenic Effects:  No information available

Specific Target Organ Toxicity
STOT - single exposure  No information available
STOT - repeated exposure  No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity
Ecotoxicity effects:  No data available.

Chlorobenzene - 108-90-7
Freshwater Algae Data:  2.55 - 420 mg/L EC50 Pseudokirchneriella subcapitata 96 h
12.5 mg/L EC50 Pseudokirchneriella subcapitata 96 h
Freshwater Fish Species Data:  4.1-5.3 mg/L LC50 Oncorhynchus mykiss 96 h flow-through 1
4.5 mg/L LC50 Pimephales promelas 96 h static 1
4.1-4.9 mg/L LC50 Lepomis macrochirus 96 h static 1
6.9-7.9 mg/L LC50 Lepomis macrochirus 96 h flow-through 1
91 mg/L LC50 Brachydanio rerio 96 h static 1
36.35-58.19 mg/L LC50 Poecilia reticulata 96 h static 1
7-8.5 mg/L LC50 Pimephales promelas 96 h flow-through 1
Water Flea Data:  0.59 mg/L EC50 Daphnia magna 48 h
Persistence and degradability:  No information available
Bioaccumulative potential:  No information available
Mobility:  No information available
13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>U037</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT

UN-No: UN1134
Proper Shipping Name: Chlorobenzene
Hazard Class: 3
Subsidiary Risk:
Packing Group: III
ERG No: 130
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Symbol(s): R3

TDG (Canada)

UN-No: UN1134
Proper Shipping Name: Chlorobenzene
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: III
Description: No information available

ADR

UN-No: UN1134
Proper Shipping Name: Chlorobenzene
Hazard Class: 3
Packing Group: III
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available

CEFIC Tremcard No:

IMO / IMDG

UN-No: UN1134
Proper Shipping Name: Chlorobenzene
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: III
Description: No information available

Product code: HP492
Product name: CHLOROBENZENE,
EXCEEDS A.C.S. SPECIFICATIONS,
HPLC GRADE
14. TRANSPORT INFORMATION

IMDG Page: No information available
Marine Pollutant: No information available
EMS: F-E
MFAG: No information available
Maximum Quantity: No information available

RID
UN-No: UN1134
Proper Shipping Name: Chlorobenzene
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: III
Classification Code: No information available
Description: No information available

ICAO
UN-No: UN1134
Proper Shipping Name: Chlorobenzene
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: III
Description: No information available

IATA
UN-No: UN1134
Proper Shipping Name: Chlorobenzene
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: III
ERG Code: 3L
Description: No information available

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene</td>
<td>Present</td>
<td>Present KE-25489</td>
<td>Present</td>
<td>Present (3)-31</td>
<td>Present</td>
<td>Present</td>
<td>Present 203-628-5</td>
</tr>
</tbody>
</table>

U.S. Regulations

Chlorobenzene

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0379
New Jersey (EHS) List: 0379 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
Pennsylvania RTK: Environmental hazard
Pennsylvania RTK - Environmental Hazard List: Present
Pennsylvania RTK - Special Hazardous Substances: Present
RI RTK - Hazardous Substances List: Present
Michigan - Critical Materials List: Present
Minnesota - Hazardous Substance List: Present
New York Release Reporting - List of Hazardous Substances:
  = 100 lb RQ
  = 1 lb RQ

Product code: HP492  Product name: CHLOROBENZENE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE

Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

**CERCLA/SARA**

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene</td>
<td>= 100 lb final RQ = 45.4 kg final RQ</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>1.0 % de minimis concentration</td>
</tr>
</tbody>
</table>

**U.S. TSCA**

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
</tr>
</thead>
</table>

**Canada**

**WHMIS hazard class:**
B2  Flammable liquid  
D2B  Toxic materials

**Chlorobenzene**
B2  D1B  D2B

**Canada Controlled Products Regulation:**
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

<table>
<thead>
<tr>
<th>Components</th>
<th>WHMIS Ingredient Disclosure List -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene</td>
<td>1 %</td>
</tr>
</tbody>
</table>

**Inventory**

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**Product code:** HP492  
**Product name:** CHLOROBENZENE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
**EU Classification**

**R-phrase(s)**
- R10 - Flammable.
- R22 - Harmful if swallowed.
- R38 - Irritating to skin.
- R41 - Risk of serious damage to eyes.
- R43 - May cause sensitization by skin contact.

**S-phrase(s)**
- none

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorobenzene</td>
<td>R10</td>
<td>25%&lt;=C: Xn,N; R20-51/53</td>
<td>S2  S24/25  S61</td>
</tr>
<tr>
<td></td>
<td>Xn; R20</td>
<td>5%&lt;=C&lt;25%: Xn,N; R20-52/53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N; R51-53</td>
<td>2.5%&lt;=C&lt;5%: R52/53</td>
<td></td>
</tr>
</tbody>
</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**
None.

---

**16. OTHER INFORMATION**
16. OTHER INFORMATION

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet