Material Safety Data Sheet
Hexachlorobenzene, 99%

MSDS# 11631

Section 1 - Chemical Product and Company Identification

MSDS Name: Hexachlorobenzene, 99%
Catalog Numbers: AC173880000, AC173880010, AC173880100, AC173885000
Synonyms: Perchlorobenzene.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaal 3a
2440 Geel, Belgium

Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99

CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 118-74-1
Chemical Name: Hexachlorobenzene
%
99
EINECS#: 204-273-9

Hazard Symbols: T N
Risk Phrases: 45 48/25 50/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation: May cause respiratory tract irritation.
Chronic: May cause liver and kidney damage. Repeated contact may result in skin burns. Chronic exposure may cause enlarged thyroid, lymph nodes, skin photosensitization and abnormal growth of body hair.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: Not available

Flash Point: 242 deg C (467.60 deg F)

Explosion Limits: Not available

NFPA Rating: NFPA Rating:

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use only with adequate ventilation.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
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<tbody>
<tr>
<td>Hexachlorobenzene</td>
<td>0.002 mg/m3; Skin</td>
<td>none listed</td>
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OSHA Vacated PELs: Hexachlorobenzene: None listed

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Powder
Color: white
Odor: None reported.
pH: Not available
Vapor Pressure: 1 mbar @ 114 C
Vapor Density: 9.83
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 332 deg C @ 760.00 mmHg (629.60°F)
Freezing/Melting Point: 227.00 - 229.00 deg C
Decomposition Temperature: Not available
Solubility in water: insoluble
Specific Gravity/Density:
Molecular Formula: C6Cl6
Molecular Weight: 284.77

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials.
Incompatibilities with Other Materials Dimethyl formamide.
Hazardous Decomposition Products Hydrogen chloride, carbon monoxide, carbon dioxide.
Hazardous Polymerization Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 118-74-1: DA2975000
RTECS:
CAS# 118-74-1: Inhalation, mouse: LC50 = 4 gm/m3;
Inhalation, rabbit: LC50 = 1800 mg/m3;
Inhalation, rabbit: LC50 = 1800 mg/m3/6H;
Inhalation, rat: LC50 = 3600 mg/m3;
Oral, mouse: LD50 = 4 gm/kg;
Oral, rabbit: LD50 = 2600 mg/kg;
Oral, rat: LD50 = 10 gm/kg;
Oral, rat: LD50 = 3500 mg/kg;
Carcinogenicity: Hexachlorobenzene - ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
California: carcinogen, initial date 10/1/87 NTP: Suspect carcinogen IARC: Group 2B carcinogen
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: HEXACHLOROBENZENE
Hazard Class: 6.1
UN Number: UN2729
Packing Group: III
Canada TDG
USA RQ: CAS# 118-74-1: 10 lb final RQ; 4.54 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T N

Risk Phrases:
- R 45 May cause cancer.
- R 48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.
- R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:
- S 53 Avoid exposure - obtain special instructions before use.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 60 This material and its container must be disposed of as hazardous waste.
- S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 118-74-1: 3

Canada

CAS# 118-74-1 is listed on Canada's DSL List

Canadian WHMIS Classifications: Not available

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 118-74-1 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 118-74-1 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 5/27/1998
Revision #6 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility 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. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.