SAFETY DATA SHEET
p,p'-DDT


Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Code: 24243
Product Name: p,p'-DDT
Synonyms: 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-benzene]; 4,4'-DDT;
4,4'-Dichlorodiphenyltrichloroethane; p,p'-Dichlorodiphenyltrichloroethane; Dicophaner; NSC 8939;

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses: For research use only, not for human or veterinary use.

1.3 Details of the Supplier of the Safety Data Sheet:
Company Name: Cayman Chemical Company
1180 E. Ellsworth Rd.
Ann Arbor, MI 48108
Web site address: www.caymanchem.com
Information: Cayman Chemical Company +1 (734)971-3335

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

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:
Acute Toxicity: Oral, Category 3
Carcinogenicity, Category 2
Specific Target Organ Toxicity (repeated exposure), Category 1
Aquatic Toxicity (Acute), Category 1
Aquatic Toxicity (Chronic), Category 1

2.2 Label Elements:

GHS Signal Word: Danger
GHS Hazard Phrases:
H301: Toxic if swallowed.
H351: Suspected of causing cancer.
H372: Causes damage to organs through prolonged or repeated exposure.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

GHS Precaution Phrases:
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P260: Do not breathe {dust/fume/gas/mist/vapors/spray}.
P264: Wash (hands) thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear {protective gloves/protective clothing/eye protection/face protection}.

GHS Response Phrases:
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P308+313: IF exposed or concerned: Get medical attention/advice.
p,p'-DDT
SAFETY DATA SHEET

P314: Get medical attention/advice if you feel unwell.
P330: Rinse mouth.
P391: Collect spillage.

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

2.3 Adverse Human Health
Effects and Symptoms:
Causes damage to organs through prolonged or repeated exposure.

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.
Suspected of causing cancer.
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.

Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>CAS # / RTECS #</th>
<th>Hazardous Components (Chemical Name)/REACH Registration No.</th>
<th>Concentration</th>
<th>EC No./EC Index No.</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-29-3 KJ3325000</td>
<td>DDT {1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane; Clofenotane; 4,4-DDT; Dichlorodiphenyltrichloroethane}</td>
<td>100.0 %</td>
<td>200-024-3 602-045-00-7</td>
<td>Acute Tox.(O) 3: H301 Carcinogen 2: H351 STOT (RE) 1: H372 Aquatic (A) 1: H400 Aquatic (C) 1: H410</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

4.1 Description of First Aid Measures:

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.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Media:
Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Unsuitable Extinguishing Media:
Use water spray to cool fire-exposed containers.

A solid water stream may be inefficient.

5.2 Flammable Properties and Hazards:
No data available.

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

5.3 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.

Multi-region format
### Section 6. Accidental Release Measures

6.1 **Protective Precautions, Protective Equipment and Emergency Procedures:**

Contains spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local regulations.

6.2 **Environmental Precautions:**

Take steps to avoid release into the environment, if safe to do so.

6.3 **Methods and Material For Containment and Cleaning:**

Avoid breathing vapors and provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

### Section 7. Handling and Storage

7.1 **Precautions To Be Taken in Handling:**

Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure.

7.2 **Precautions To Be Taken in Storing:**

Keep container tightly closed. Store in accordance with information listed on the product insert.

### Section 8. Exposure Controls/Personal Protection

8.1 **Exposure Parameters:**

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Chemical Name</th>
<th>Jurisdiction</th>
<th>Recommended Exposure Limits</th>
<th>Notations</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-29-3</td>
<td>DDT {1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane; Clofenotane; 4,4-DDT;</td>
<td>ACGIH TLV</td>
<td>TLV: 1 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dichlorodiphenyltrichloroethane}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>France VL</td>
<td>TWA: 1 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PELs</td>
<td>PEL: 1 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

8.2 **Exposure Controls:**

8.2.1 **Engineering Controls (Ventilation etc.):**

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.2.2 **Personal protection equipment:**

- **Eye Protection:** Safety glasses
- **Protective Gloves:** Compatible chemical-resistant gloves
- **Other Protective Clothing:** Lab coat
- **Respiratory Equipment:** NIOSH approved respirator, as conditions warrant.

**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.
- No data available.
Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States: [ ] Gas       [ ] Liquid       [ X ] Solid
Appearance and Odor: A 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: MeOH (heated); chloroform (slightly);
Octanol/Water Partition Coefficient: No data.
Autoignition Pt: No data.
Decomposition Temperature: No data.
Viscosity: No data.

9.2 Other Information

Percent Volatile: No data.
Molecular Formula & Weight: C14H9Cl5         354.5

Section 10. Stability and Reactivity

10.1 Reactivity: No data available.
10.2 Stability: Unstable [ ]       Stable [ X ]
10.3 Stability Note(s): Stable if stored in accordance with information listed on the product insert.
Polymerization: Will occur [ ]       Will not occur [ X ]
10.4 Conditions To Avoid: No data available.
10.5 Incompatibility - Materials iron and iron salts oxidizing agents
To Avoid: carbon dioxide
10.6 Hazardous Decomposition or Byproducts: carbon monoxide hydrogen chloride gas
Section 11. Toxicological Information

11.1 Information on Toxicological Effects: The toxicological effects of this product have not been thoroughly studied.

Toxicological Effects: p,p'-DDT - Toxicity Data: Oral LDLO (infant): 150 mg/kg; Oral TDLO (man): 6 mg/kg; Oral LD50 (rat): 87 mg/kg; Intraperitoneal LD50 (rat): 9100 ug/kg; Subcutaneous LD50 (rat): 1500 mg/kg; Intraperitoneal LD50 (mouse): 32 mg/kg;

Irritation or Corrosion: p,p'-DDT - Investigated as an agricultural chemical, 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.

Carcinogenicity: p,p'-DDT RTECS Number: KJ3325000

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-29-3</td>
<td>DDT {1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane; Clofenotane; 4,4-DDT; Dichlorodiphenyltrichloroethane}</td>
<td>Possible</td>
<td>2B</td>
<td>A3</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Section 12. Ecological Information

12.1 Toxicity: Avoid release into the environment.

12.2 Persistence and Degradability:

No data available.

12.3 Bioaccumulative Potential:

No data available.

12.4 Mobility in Soil:

No data available.

12.5 Results of PBT and vPvB assessment:

No data available.

12.6 Other adverse effects:

No data available.

Section 13. Disposal Considerations

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

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Toxic solid, organic, n.o.s. (p,p'-DDT )

DOT Hazard Class: 6.1 POISON

UN/NA Number: UN2811 Packing Group: III

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Toxic solid, organic, n.o.s. (p,p'-DDT )

UN Number: 2811 Packing Group: III

Hazard Class: 6.1 - POISON
SAFETY DATA SHEET
p,p\(^1\)-DDT

**14.3 AIR TRANSPORT (ICAO/IATA):**

- **ICAO/IATA Shipping Name:** Toxic solid, organic, n.o.s. (p,p'-DDT)
- **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.

**Section 15. Regulatory Information**

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

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-29-3</td>
<td>DDT (1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane; Clofenotane; 4,4-DDT; Dichlorodiphenyltrichloroethane)</td>
<td>No</td>
<td>Yes 1 LB</td>
<td>No</td>
</tr>
</tbody>
</table>

**Other US EPA or State Lists**

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>CAA HAP,ODC: No; CWA NPDES: Yes; TSCA: Yes - Inventory, 5A(2), 12(b); CA PROP.65: Yes: Canc+RDTox(F/M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-29-3</td>
<td>DDT (1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane; Clofenotane; 4,4-DDT; Dichlorodiphenyltrichloroethane)</td>
<td></td>
</tr>
</tbody>
</table>

**Regulatory Information Statement:**
This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) 1272/2008.

**Section 16. Other Information**

**Revision Date:** 07/27/2018

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

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