Dear Customer,

This File Contains Both The ANSI Material Safety Data Sheet and The GHS Safety Data Sheet For The Same Product

Spectrum is currently transitioning all chemical product labeling from the ANSI\(^1\) format to the GHS\(^2\) format (see note below). In order to ensure that you receive complete labelling during the transition, we have included both the ANSI MSDS and the GHS SDS in a single file. The ANSI MSDS is given first, followed by the GHS SDS. Please use whichever matches the container label.

**Why It Matters:**

The complete precautionary labeling for this chemical consists of BOTH the label on the container AND the matching Material Safety Data Sheet (for ANSI labels) or Safety Data Sheet (for GHS labels). Both elements of the labeling [Label + (M)SDS] are written to be read and understood together, so as to provide complete precautionary information. It is intended for you to read and understood BOTH before handling or using the chemical.

**Picking the Right One: 2 Easy Ways To Tell Whether Your Container Has an ANSI Label or a GHS Label**

1) GHS labels: any pictogram displayed in the upper left-hand corner will be inside a red diamond. ANSI labels: pictograms, if present, will be inside individual black boxes.

2) GHS labels: on the bottom of the right-hand panel of the label, locate the Lot Number. Directly to the left will be a string of control characters, followed by a single letter. For GHS labels, the string of characters will end in “GHS.”

---

**Label in ANSI Format**

---

**CORPORATE OFFICES**

14422 South San Pedro Street
Gardena, California 90248

PHONE 310.516.8000
FAX 310.516.9843

AN ISO 9001:2008 REGISTERED COMPANY

www.spectrumchemical.com
Sincerely,

Regulatory Affairs
SAFETY DATA SHEET

Preparation Date: No data available  Revision Date: 03/11/2015  Revision Number:  G1

Product identifier

Product code: M3239
Product Name: MITOTANE, USP

Other means of identification

Synonyms: 1,1-Dichloro-2,2-bis(2,4’-dichlorophenyl)ethane; 1,1-Dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)ethane; 1,1-Dichloro-2-(p-chlorophenyl)-2-(o-chlorophenyl)ethane; 2,4'-Ddd; 2,4'-Dichlorophenyldichloroethane; 2-(o-Chlorophenyl)-2-(p-chlorophenyl)-1,1-dichloroethane; Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)-; Chlodian; Chlodithane; Lysodren; o,p'-Dichlorodiphenyldichloroethane

CAS #: 53-19-0
RTECS #: KH7880000
C#: 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)

Carcinogenicity Category 2

Label elements
Hazard statements
Suspected of causing cancer

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
Not available

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage
Store locked up

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>Mitotane</td>
<td>53-19-0</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 irritation develops. Consult a physician if necessary.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

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. Consult a physician if necessary.

Product code: M3239  Product name: MITOTANE, USP
Most important symptoms and effects, both acute and delayed
Symptoms Suspected of causing cancer.
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. Water spray mist or foam.
Unsuitable Extinguishing Media: No information available.
Specific hazards arising from the chemical
Hazardous Combustion Products: Carbon oxides, halogenated compounds
Specific hazards: May be combustible at high temperatures
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard
Special Protective Actions for Firefighters
Specific Methods: No information available.
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. Use personal protective equipment. Avoid dust formation. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition.
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. Cover with plastic sheet to prevent spreading.
Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling
Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.
**Safe Handling Advice:**
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

**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. Store away from incompatible materials. Sensitive to light. Store in light-resistant containers.

**Incompatible Materials:**
No special restrictions on storage with other products

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

**National occupational exposure limits**

**United States**

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
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**Canada**

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<th>Ontario</th>
<th>Quebec</th>
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**Australia and Mexico**

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<td>None</td>
</tr>
<tr>
<td>53-19-0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Appropriate engineering controls

**Engineering measures to reduce exposure:**
Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment**

- **Eye protection:** Safety glasses. Safety glasses with side-shields.
- **Skin and body protection:** Chemical resistant apron. Gloves. Long sleeved clothing.
- **Respiratory protection:** Effective dust mask. Wear respirator with dust filter.
- **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:** M3239

**Product name:** MITOTANE, USP
9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.
Odor: Aromatic.

Appearance: Crystalline powder.
Taste: No information available

Color: White.

Molecular/Formula weight: 320.04

Formula: C14H10Cl4

Flash Point Tested according to: Not available
Lower Explosion Limit (%): No data available
Upper Explosion Limit (%): No data available

Flash Point (°C): No data available
Flashpoint (°C/°F): No information available.

Autoignition Temperature (°C/°F): No information available
pH: No information available

Boiling point/range(°C/°F): No information available
Decomposition temperature(°C/°F): No information available

Specific gravity: No information available
Density (g/cm3): No information available

Evaporation rate: No information available
Density (g/cm3): No information available

Odor threshold (ppm): No information available
Partition coefficient (n-octanol/water): No information available

Miscibility: No information available
Solubility:
Soluble in diethyl ether
Soluble in fixed oils
Soluble in Carbon tetrachloride
Soluble in fats
Soluble in isoctane
Soluble in petroleum spirit
Insoluble in cold water

Viscosity: No information available

Flash Point Tested according to: Not available

Physical state: Solid.

Appearance: Crystalline powder.
Taste: No information available

Color: White.

Molecular/Formula weight: 320.04

Formula: C14H10Cl4

Flash Point Tested according to: Not available
Lower Explosion Limit (%): No data available
Upper Explosion Limit (%): No data available

Flash Point (°C): No data available
Flashpoint (°C/°F): No information available.

Autoignition Temperature (°C/°F): No information available
pH: No information available

Boiling point/range(°C/°F): No information available
Decomposition temperature(°C/°F): No information available

Specific gravity: No information available
Density (g/cm3): No information available

Evaporation rate: No information available
Density (g/cm3): No information available

Odor threshold (ppm): No information available
Partition coefficient (n-octanol/water): No information available

Miscibility: No information available
Solubility:
Soluble in diethyl ether
Soluble in fixed oils
Soluble in Carbon tetrachloride
Soluble in fats
Soluble in isoctane
Soluble in petroleum spirit
Insoluble in cold water

Viscosity: No information available

Flash Point Tested according to: Not available

Physical state: Solid.

Appearance: Crystalline powder.
Taste: No information available

Color: White.

Molecular/Formula weight: 320.04

Formula: C14H10Cl4

Flash Point Tested according to: Not available
Lower Explosion Limit (%): No data available
Upper Explosion Limit (%): No data available

Flash Point (°C): No data available
Flashpoint (°C/°F): No information available.

Autoignition Temperature (°C/°F): No information available
pH: No information available

Boiling point/range(°C/°F): No information available
Decomposition temperature(°C/°F): No information available

Specific gravity: No information available
Density (g/cm3): No information available

Evaporation rate: No information available
Density (g/cm3): No information available

Odor threshold (ppm): No information available
Partition coefficient (n-octanol/water): No information available

Miscibility: No information available
Solubility:
Soluble in diethyl ether
Soluble in fixed oils
Soluble in Carbon tetrachloride
Soluble in fats
Soluble in isoctane
Soluble in petroleum spirit
Insoluble in cold water

Viscosity: No information available

Flash Point Tested according to: Not available

10. STABILITY AND REACTIVITY

Reactivity
No information available

Chemical stability
Stability: Sensitive to light. Exposure to light accelerates decomposition. Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Incompatible Materials: No information available

Hazardous decomposition products: No information available

Other Information
Corrosivity: No information available

Product code: M3239
Product name: MITOTANE, USP
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Toxicity

Component Information

*Mitotane - 53-19-0*

**LD50/oral/rat =** > 5 g/kg Oral LD50 Rat
**LD50/oral/mouse =** >4 g/kg Oral LD50 Mouse
**LD50/dermal/rat =** >5g/kg Oral LD50 Rat
**LD50/dermal/rabbit =** No information available
**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 =** >5g/kg

**LD50/oral/mouse =**
**Value - Acute Tox Oral =** >4g/kg

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

**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:** May cause skin irritation.

**Eye Contact:** May cause eye irritation.

**Inhalation**
May cause irritation of respiratory tract.
Ingestion

Can cause anorexia, nausea, vomiting, and sometimes hypermotility and diarrhea. It can also affect behavior/central nervous system and cause dizziness vertigo, sedation, lethargy, decreased memory, somnolence, and depression. Ocular side-effects may occur including blurred vision, diplopia, lenticular opacities, and retinopathy. Other side effects include hypersensitivity reactions, hematuria, albuminuria, skin rashes, fever, myalgia, hemorrhagic cystitis, renal impairment, flushing, hypertension, orthostatic hypotension, leukopenia, pancytopenia, normocytic anemia, pigmented or nucleated red blood cells, hyperlipoproteinemia with elevation of serum cholesterol and triglyceride levels. It lowers serum thyroxine levels which may result in hypothyroidism.

Aspiration hazard

No information available

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

Chronic Toxicity

Prolonged or repeated ingestion may cause permanent brain damage. It may also cause gynecomastia in men.

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>
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</thead>
<tbody>
<tr>
<td>Mitotane</td>
<td>Not listed</td>
<td>Monograph 53 [1991] DDT and associated compounds</td>
<td>Not listed</td>
<td>Present</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

Target Organs: No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

Product code: M3239

Product name: MITOTANE, USP
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>Mitotane</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: None
ERG No: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available

TDG (Canada)
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

ADR
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant: No information available
MFAG: No information available
14. TRANSPORT INFORMATION

Maximum Quantity: No information available

RID
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Classification Code: No information available
Description: No information available

ICAO
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

IATA
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>KOREA KECL (PICCS)</th>
<th>Philippines</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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<tbody>
<tr>
<td>Mitotane</td>
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<td>Not present</td>
<td>Not present</td>
<td>Not present</td>
<td>Not present</td>
<td>Present</td>
<td>Present 200-166-6</td>
</tr>
</tbody>
</table>

U.S. Regulations


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>
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</thead>
<tbody>
<tr>
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<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>Mitotane</td>
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<td>None</td>
<td>None</td>
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</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>
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</thead>
<tbody>
<tr>
<td>Mitotane</td>
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<td>Not Applicable</td>
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</tbody>
</table>

Canada

WHMIS hazard class:
Non-controlled

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.

Inventory

<table>
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<tr>
<th>Components</th>
<th>Canada (DSL)</th>
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<tbody>
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Components Classification

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

EU Classification

**R-phrase(s)**
R40 - Limited evidence of a carcinogenic effect

**S-phrase(s)**
S 2 - Keep out of the reach of children.
S36 - Wear suitable protective clothing.
S37 - Wear suitable gloves.

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
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<tbody>
<tr>
<td>Mitotane</td>
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<td>No information</td>
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</table>

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

Indication of danger:
None.

16. OTHER INFORMATION

Product code: M3239  Product name: MITOTANE, USP
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
### Material Safety Data Sheet

#### Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Common Name/Trade Name</th>
<th>Mitotane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>SPECTRUM LABORATORY PRODUCTS INC.</td>
</tr>
<tr>
<td></td>
<td>14422 S. SAN PEDRO STREET</td>
</tr>
<tr>
<td></td>
<td>GARDENA, CA 90248</td>
</tr>
<tr>
<td>Commercial Name(s)</td>
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<tr>
<td>Synonym</td>
<td>1,1-Dichloro-2,2-bis(2,4”-dichlorophenyl)ethane;</td>
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<tr>
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<td>1,1-Dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)ethane;</td>
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<tr>
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<td>Chloditan;</td>
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<td>Chlidthane;</td>
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<td>Lysodren;</td>
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<tr>
<td>Chemical Formula</td>
<td>C14-H10-Cl4</td>
</tr>
</tbody>
</table>

**Catalog Number(s).**
- C2915, M3239

**CAS#**
- 53-19-0

**RTECS**
- KH7880000

**TSCA**
- TSCA 8(b) inventory: No products were found.

**CI#**
- Not available.

**IN CASE OF EMERGENCY**
- CHEMTREC (24hr) 800-424-9300
- CALL (310) 516-8000

#### Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Mitotane</td>
<td>53-19-0</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

**Toxicological Data on Ingredients**

**Mitotane:**
- ORAL (LD50): Acute: >5000 mg/kg [Rat]. >4000 mg/kg [Mouse]. >5000 mg/kg [Guinea pig].

Continued on Next Page
### Section 3. Hazards Identification

<table>
<thead>
<tr>
<th>Potential Acute Health Effects</th>
<th>Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.</th>
</tr>
</thead>
</table>
| Potential Chronic Health Effects | CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC.  
MUTAGENIC EFFECTS: Not available.  
TERATOGENIC EFFECTS: Not available.  
DEVELOPMENTAL TOXICITY: Not available.  
Repeated or prolonged exposure is not known to aggravate medical condition. |

### Section 4. First Aid Measures

| Eye Contact | Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs. |
| Skin Contact | Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. |
| Serious Skin Contact | Not available. |
| Inhalation | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
| Serious Inhalation | Not available. |
| Ingestion | Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear. |
| Serious Ingestion | Not available. |

### Section 5. Fire and Explosion Data

| Flammability of the Product | May be combustible at high temperature. |
| Auto-Ignition Temperature | Not available. |
| Flash Points | Not available. |
| Flammable Limits | Not available. |
| Products of Combustion | These products are carbon oxides (CO, CO2), halogenated compounds. |
| Fire Hazards in Presence of Various Substances | Slightly flammable to flammable in presence of heat. |
| Explosion Hazards in Presence of Various Substances | Risks of explosion of the product in presence of mechanical impact: Not available.  
Risks of explosion of the product in presence of static discharge: Not available. |
| Fire Fighting Media and Instructions | SMALL FIRE: Use DRY chemical powder.  
LARGE FIRE: Use water spray, fog or foam. Do not use water jet. |
| Special Remarks on Fire Hazards | As with most organic solids, fire is possible at elevated temperatures |
| Special Remarks on Explosion Hazards | Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. |
Section 6. Accidental Release Measures

**Small Spill**
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill**
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

**Precautions**
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

**Storage**
Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

**Engineering Controls**
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection**
Safety glasses. Lab coat. Dust respirator. A dust respirator is only necessary if ventilation is inadequate and handling of the material generates visible dust clouds. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill**
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits**
Not available.

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical state and appearance</th>
<th>Solid. (Crystalline powder.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>320.04 g/mole</td>
</tr>
<tr>
<td>pH (1% soln/water)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>75°C (167°F) - 81°C.</td>
</tr>
<tr>
<td>Critical Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor</td>
<td>Aromatic. (Slight.)</td>
</tr>
<tr>
<td>Taste</td>
<td>Not available.</td>
</tr>
<tr>
<td>Color</td>
<td>White.</td>
</tr>
</tbody>
</table>

**Dispersion Properties**
See solubility in water, diethyl ether.

**Solubility**
Soluble in diethyl ether. Insoluble in cold water. Soluble in ethyl alcohol, petroleum spirit, carbon tetrachloride, iso-octane, and in fixed oils and fats. It is approximately 10% soluble in fats or oils.

Continued on Next Page
### Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Instability Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions of Instability</td>
<td>Excess heat, dust generation</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Not available.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special Remarks on Reactivity</td>
<td>Sensitive to light.</td>
</tr>
<tr>
<td>Special Remarks on Corrosivity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Polymerization</td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>

### Section 11. Toxicological Information

#### Routes of Entry
- Inhalation
- Ingestion

#### Toxicity to Animals
- Acute oral toxicity (LD50): >4000 mg/kg [Mouse].

#### Chronic Effects on Humans
- **CARCINOGENIC EFFECTS**: Classified 2B (Possible for human.) by IARC.

#### Other Toxic Effects on Humans
- Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

#### Special Remarks on Toxicity to Animals
- Not available.

#### Special Remarks on Chronic Effects on Humans
- May affect genetic material (mutagenic).
- May cause adverse reproductive effects based on animal data.
- May cause cancer.

#### Special Remarks on other Toxic Effects on Humans
- Potential Health Effects:
  - Skin: May cause skin irritation.
  - Eyes: Dust may cause eye irritation.
  - Inhalation: Dust may cause respiratory tract irritation.
  - Ingestion: Can cause anorexia, nausea, vomiting, and sometimes hypermotility and diarrhea. It can also affect behavior/central nervous system and cause dizziness, vertigo, sedation, lethargy, decreased memory, somnolence, and depression. Ocular side-effects may occur including blurred vision, diplopia, lenticular opacities, and retinopathy. Other side effects include hypersensitivity reactions, hematuria, albuminuria, skin rashes, fever, myalgia, hemorrhagic cystitis, renal impairment, flushing, hypertension, orthostatic hypotension, leukopenia, pancytopenia, normocytic anemia, pigmented or nucleated red blood cells, hyperlipoproteinemia with elevation of serum cholesterol and triglyceride levels. It lowers serum thyroxine levels which may result in hypothyroidism. Chronic Potential Health Effects:
    - Ingestion: Prolonged or repeated ingestion may cause permanent brain damage. It may also cause gynecomastia in men.
    - Medical Conditions Aggravated by Exposure: Hypersensitivity to Mitotane.

### Section 12. Ecological Information

#### Ecotoxicity
- Not available.

#### BOD5 and COD
- Not available.

#### Products of Biodegradation
- Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

#### Toxicity of the Products of Biodegradation
- The products of degradation are more toxic than the product itself.
Section 13. Disposal Considerations

Waste Disposal

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification

Not a DOT controlled material (United States).

Identification

Not applicable.

Special Provisions for Transport

Not applicable.

DOT (Pictograms)


e

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations

No products were found.

California Proposition 65

Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINES no. 200-166-6)

Other Classifications

WHMIS (Canada) Not controlled under WHMIS (Canada).


S2- Keep out of the reach of children.

S36/37- Wear suitable protective clothing and gloves.

HMIS (U.S.A.)

Health Hazard 1

Fire Hazard 1

Reactivity 0

Personal Protection E

National Fire Protection Association (U.S.A.)

Flammability

Reactivity

Specific hazard

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

Continued on Next Page
Protective Equipment

- Gloves.
- Lab coat.
- Dust respirator. Be sure to use an approved/certified respirator or equivalent.
- Safety glasses.

Section 16. Other Information

MSDS Code: C0411

References: Not available.


CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) 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 MSDS. 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 MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.