



# SAFETY DATA SHEET

## DREXEL DIMETHOATE 2.67 SYSTEMIC INSECTICIDE/MITICIDE

### Section 1: Material Identification

**Product Name:** Drexel Dimethoate 2.67 Systemic Insecticide/Miticide

**EPA Reg No.:** 19713-232

**CAS NO:** 60-51-5

**Formula:** C<sub>5</sub>H<sub>12</sub>NO<sub>3</sub>PS<sub>2</sub>

**Company:** Drexel Chemical Company  
1700 Channel Avenue  
Memphis, TN 38106

**Synonyms:** O,O-dimethyl S-methylcarbamoylmethyl phosphorodithioate

**Identifiers:**  
**EINECS:** 200-480-3  
**RTECS:** TE1750000  
**DOT:** See Section 14 for Transport Information

#### Emergency Telephone Number:

CHEMTREC	Drexel Chemical Co.
Tel: 1-800-424-9300	901-774-4370

This product is an EPA FIFRA registered pesticide. Some of the classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Please see **Section 15: REGULATORY INFORMATION** for explanation.

### Section 2: Hazard Identification (As defined by the OSHA Hazard Communication Standard, 29)

#### GHS classification:

<b>Hazards:</b>	Acute toxicity - oral	Category 4
	Skin corrosion/irritation	Category 2
	Eye damage/irritation	Category 2B
	Aspiration hazard	Category 1
	Specific target organ toxicity – (single exposure)	Category 1
	Specific target organ toxicity – (repeated exposure)	Category 2

Aquatic acute toxicity  
Flammable liquids

Category 2  
Category 3

**GHS label elements:**

**Signal word:**

Danger



**Hazard statement:**

Harmful if swallowed  
Causes skin irritation  
Causes eye irritation  
May be fatal if swallowed and enters airways  
Causes damage to nervous system  
May cause damage to nervous system through prolonged or repeated exposure  
Toxic to aquatic life  
Flammable liquid and vapor

**Precautionary statements:**

**Prevention:**

Wash thoroughly after handling.  
Do not breathe dust/fume/gas/mist/vapors/spray.  
Wear protective gloves chemically resistant to this material.  
Wear eye protection/face protection (see Section 8).  
Wash face and hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Avoid release to the environment from other than intended use.  
Keep away from heat/sparks/open flames/hot surfaces – No smoking.  
Keep container tightly closed.  
Use explosion-proof electrical/ventilating/lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Ground/bond container and receiving equipment.

**Response:**

**If swallowed:** Immediately call a poison control center/doctor. Rinse mouth. Do NOT induce vomiting.  
**If on skin (or Hair): Take off immediately all contaminated clothing. Rinse skin with water shower.** Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**If exposed:** Call poison center/doctor. Specific treatment see Note to Physician, Section 4.  
Collect spillage.  
**If on skin (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower.  
**Get medical advice if you feel unwell.**  
In case of fire use foam, dry chemical, carbon dioxide or water to extinguish.

**Storage:** Store locked up.  
Store in well-ventilated place.  
Keep cool.

**Disposal:** Disposal of contents/container must be in accordance with your local or area regulations.

### Section 3: Composition Information

<b>Components</b>	<b>CAS No.:</b>	<b>% By Wt.:</b>	<b>OSHA PEL:</b>	<b>ACGIH TLV:</b>
Active Ingredient: Dimethoate	60-51-5	30.5%	N/Av	0.1 mg/m <sup>3</sup>
Inert Ingredients:	N/A	69.5%	N/A	N/A

### Section 4: First-Aid Measures

**Have the product container or label when calling a poison control center or doctor or going for treatment.**

**If in Eyes:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**If Swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious or convulsing person.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes.

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor immediately for further treatment advice.

**Note to Physician:** Atropine is antidotal. Pralidoxime chloride may be effective as an adjunct to atropine. This product may cause cholinesterase inhibition. Contains petroleum distillate. Vomiting may cause aspiration pneumonia. If swallowed, stomach contents should be evacuated quickly in a manner which avoids aspiration. Otherwise treatment should be directed at the control of symptoms and clinical condition. Dimethoate is an organophosphate insecticide/miticide.

### Section 5: Fire Fighting Measures

**Fire Hazards:** Combustible liquid and vapor. Will ignite when exposed to heat, flame and other sources of ignition. Vapors can travel to a source of ignition and flash back causing an explosive and fire. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Thermal decomposition during a fire can produce fumes and irritating gases.

**Flammability classification (OSHA 29 CFR 1910.1200):** Combustible

**Flash point:** 124°F

**Lower flammable limit (% by volume):** N/Av

**Upper flammable limit (% by volume):** N/Av

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Evacuate the area and fight the fire from upwind at a safe distance to avoid hazardous vapors or decomposition products. Dike and collect fire-extinguishing water to prevent environmental damage and excessive waste runoff.

**Firefighting media:** Use foam, dry chemical, carbon dioxide, or water fog when fighting fires involving this product. Do not use water jet, as this may spread burning material. Minimize the use of water to avoid environmental contamination. Contain all runoff.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Use full face shield and operate in positive pressure mode. Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

**Hazardous Combustion Products:** Carbon oxides, sulfur oxides, nitrogen oxides, phosphorus oxides, irritating fumes and smoke.

**NFPA: Health: Flammability: Reactivity:**

3                      2                      0

(Rating: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Insignificant)

## Section 6: Accidental Release Measures

### Steps to be taken if Material is Released or Spilled:

- Contain spilled material if possible. Small spills: Apply suitable absorbent and sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Drexel Chemical Co. for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

### Personal Precautions:

- Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental Precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

## Section 7: Handling and Storage

### KEEP OUT OF REACH OF CHILDREN

**Handling:** **General Handling:** Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not swallow. Avoid breathing vapor. Use with adequate ventilation. Wear chemical protective equipment when handling. Keep away from heat, sparks and flame. See Section 8, Exposure Controls and Personal Protection.

**Storage:** Store in a cool, dry, ventilated and secure area designated specifically for pesticides and away from heat sources. Keep in original containers and keep containers securely closed when not in use. Do not store in excessive heat. Do not store near children, food, foodstuffs, drugs or potable water supplies.

## Section 8: Exposure Controls / Personal Protection

**Exposure Limits:** Dimethoate TLV 0.1 mg/m<sup>3</sup>

### **Personal Protective Equipment (PPE)::**

**Mixers, loaders, applicators, flaggers and other handlers must wear:**

**Eye/Face Protection:** Safety glasses with side shields or chemical splash goggles to prevent vapors or mists from entering the eyes. If using a full-face shield, always use safety glasses or goggles along with the face shield to ensure adequate protection of the eyes.

**Skin Protection:** Long-sleeved shirt and long pants, shoes plus socks and chemical resistant apron when mixing, loading, cleaning up spills or equipment.

**Hand protection:** Chemical-resistant gloves made of barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils or Viton  $\geq$  14mils.

**Respiratory Protection:** A NIOSH approved particulate respirator with an R or P filter with NIOSH approved number prefix TC-84A or a NIOSH approved powered air purifying respirator with a HE filter with NIOSH approval prefix TC-21C.

**Cleaning PPE:** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**Ingestion:** Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.

### **Engineering Controls:**

**Ventilation:** When handling this product proper ventilation is required to maintain exposure below the TLV. Ventilate all transport vehicles prior to unloading. Facilities storing or utilizing this material should be equipped with and eyewash facility and safety shower.

Mixers and loaders supporting aerial application must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticide [40 CFR 170.240(d)(4)]. The system must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. Read the Engineering Controls section on the label for additional instructions.

## Section 9: Physical and Chemical Properties

<b>Physical State:</b>	Liquid
<b>Color:</b>	Yellow
<b>Odor:</b>	Slight solvent
<b>Flash Point:</b>	124°F (Combustible)
<b>Vapor Pressure (mmHg):</b>	26 mmHg @ 20°C

<b>Boiling Point:</b>	156°C
<b>Vapor Density (air = 1):</b>	34
<b>Bulk Density (H2O = 1):</b>	8.50 lbs. /gal.
<b>Freezing Point:</b>	N/Av
<b>Solubility in water (wt. %):</b>	Emulsifies
<b>pH:</b>	6 – 8
<b>Viscosity:</b>	S10 cps @ 70°F
<b>% Volatiles:</b>	Approx. 60%

## Section 10: Stability and Reactivity

**Stability/Instability:** It is strongly advised not to heat this product above 95°F/35°C. Above 176°F/80°C the product will decompose rapidly, significantly increasing the risk of inducing explosions. The increased heat from decomposition can raise the temperature further and accelerate decomposition.

**Conditions to Avoid:** Keep this product away from heat, sparks, flame and other sources of ignition (e.g. pilot lights, electric motors, static electricity).

**Incompatible Materials:** Avoid contact with: Strong bases. Strong oxidizers. Amines.

**Hazardous Polymerization:** The decomposition reactions involve rearrangements and polymerization.

**Thermal Decomposition:** Decomposition products can include and are not limited to: Carbon oxides, sulfur oxides, nitrogen oxides and phosphorus oxides.

## Section 11: Toxicological Information

Data from laboratory studies conducted on a similar, but not identical, formulation.

### Acute Toxicity:

#### Ingestion:

- LD50, (rat): 345 mg/kg

#### Dermal:

- LD50, (rabbit): >2,020 mg/kg

#### Inhalation:

- LC50, (4h), (rat): >5.42 mg/l

#### Eye Irritation (rabbit):

- Moderately irritating (Category II for washed eyes)

#### Skin Irritation (rabbit):

- Slight irritant

#### Sensitization Skin (Guinea Pig):

- Non-sensitizer

### Chronic Toxicity and Carcinogenicity

- This product does not contain any materials which are classified as carcinogenic by OSHA, IARC, ACGIH, or NTP.



Teratogenicity, mutagenicity, and other reproductive effects: None known

## Section 12: Ecological Information

Information for the active ingredient Dimethoate:

### ENVIRONMENTAL FATE:

- Toxic to wildlife and aquatic invertebrates and is highly toxic to bees.

### Persistence and Degradability:

- Readily biodegradable, undergoes rapid degradation in the environment. Degradation occurs both aerobically and anaerobically, and biologically as well as biologically.

### Aquatic Toxicity:

- Rainbow Trout, 96 hour, LC50: (30.2 ppm)
- Daphnia magna, 48 hour, LC50: (2.5 ppm)

### Bees:

- 24 hour, LC50: 0.12 µg/bee (topical); 0.15 µg/bee (oral)

### Bird Toxicity:

- Mallard Duck, LD50: 41.7 mg/kg

## Section 13: Disposal Considerations

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

## Section 14: Transport Information

**DOT:** UN 3017, Organophosphorus Pesticides, Liquid, Toxic, Flammable, (Dimethoate/Cyclohexanone), 6.1, (3), PG-III, RQ 10 lbs., Marine Pollutant

**IMDG/IMO (vessel):** UN 3017, Organophosphorus Pesticides, Liquid, Toxic, Flammable, (Dimethoate/Cyclohexanone), 6.1, (3), PG-III, RQ 10 lbs., Marine Pollutant

**IATA/ICAO (air):** UN 3017, Organophosphorus Pesticides, Liquid, Toxic, Flammable, (Dimethoate/Cyclohexanone), 6.1, (3), PG-III, RQ 10 lbs.

**Freight Description:** Agricultural Insecticide, Liquid, n.o.s.

**ERG Guide No.:** 131

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules

relating to the transportation of the material.

## Section 15: Regulatory Information

### OSHA Hazard Communication Standard:

- This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### EPA FIFRA INFORMATION:

- This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemical. The hazard information required on the pesticide label is listed out below. The pesticide label also includes other important information, including directions for use.

**Label Hazards to Humans Statements: Warning: Causes substantial but temporary eye injury. Do not get in eyes, or on clothing. Harmful if inhaled. Avoid breathing mist. Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin.**

**EPA/CERCLA Reportable Quantity: 10 lbs.**

### SARA/TITLE III:

- **Sec. 302. Extremely Hazardous Substance Notification:** Threshold Planning Quantity 500/10000 pounds
- **Sec. 311/312. Hazard Categories:** Fire Hazard  
Immediate health hazard  
Chronic health hazard
- **Sec. 313. Toxic Chemical(s):** Dimethoate (CAS 60-51-5)
- **RCRA Waste Code:** P044

### California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

- This product is not listed.

### Toxic Substances Control Act (TSCA):

- All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

## Section 16: Other Information

*Drexel Chemical Company recommends that each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown below. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.*

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