






NFPA HAZARD RATING				U.S. TRANSPORT SUMMARY	
0	Least			 	See Section 14 for full information.
1	Slight	3	Health		
2	Moderate	2	Flammability		
3	High	0	Reactivity		
4	Severe				

SECTION 1: IDENTIFICATION	
<b>Product Name:</b> Dimate 4E <b>EPA Registration #:</b> 9779-273 <b>Product ID/Unity #:</b> 10000763, 10000764, 10125000 <b>Common Name:</b> Organophosphate insecticide <b>Chemical Description:</b> Dimethoate (O,O-Dimethyl S-[N-(methylcarbamoyl) Methyl] phosphorodithioate) <b>Recommended Uses:</b> Agricultural insecticide. See product label for complete list of uses and use sites. <b>Restrictions for Use:</b> See product label for information regarding restrictions on the use of this product.	<b>MEDICAL EMERGENCY TELEPHONE NUMBER:</b> 1-877-424-7452 (24hrs)  <b>Non-Emergency Business Inquiries:</b> 1-855-494-6343 Mon – Fri 8am – 5pm (Central Standard Time)
<b>Manufactured For:</b> WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589	
<b>FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL:</b> CHEMTREC 1-800-424-9300 (24 hours)	

SECTION 2: HAZARDS IDENTIFICATION			
<b>EMERGENCY OVERVIEW:</b> Yellow liquid with slight solvent odor. May be fatal if swallowed. Causes eye and skin irritation. Combustible liquid.			
<b>POTENTIAL HEALTH EFFECTS:</b> <b>Eyes:</b> Causes moderate but temporary eye irritation. <b>Skin:</b> Causes skin irritation. <b>Inhalation:</b> Single exposure to vapors is not likely to be hazardous. <b>Ingestion:</b> May be fatal if swallowed. <b>Preexisting Conditions:</b> Skin contact may aggravate existing skin disease. <b>Chronic Health Effects:</b> None known			
<b>Carcinogenicity</b>	NTP: Not listed	IARC: Not listed	OSHA: Not listed
<b>OSHA HCS 2012 CLASSIFICATION:</b> Acute Oral Toxicity Category 3; Skin Corrosion/Irritation Category 2; Eye Corrosion/Irritation Category 2B; Aspiration Hazard Category 1; Specific Target Organ Toxicity – Single Exposure Category 1; Specific Target Organ Toxicity – Repeated Exposure Category 2; Flammable Liquids Category 3			
<b>SIGNAL WORD:</b> DANGER			
<b>HAZARD STATEMENTS:</b> Toxic 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. Flammable liquid and vapor.			  
<b>Percent of product with unknown toxicity:</b> 0%			

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**PRECAUTIONARY STATEMENTS:**

**Prevention:** Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves chemically resistant to the material. Do not breathe mist, vapors, spray. 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. Wear protective gloves, eye protection and face protection (See Section 8).

**Response:** **If Swallowed:** Immediately call a poison control center (1-877-424-7452) or doctor for treatment advice. Rinse mouth. Do Not induce vomiting.  
**If on skin:** Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse.  
**If in eyes:** Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.  
**If exposed:** Call a poison control (1-877-424-7452) or doctor.  
**If on skin (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower.  
**In case of fire:** Use foam, dry chemical, carbon dioxide or water to extinguish.  
 Get medical attention if you feel unwell.

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

**Disposal:** Dispose of contents/container in accordance with Federal, state and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS		
Ingredient	% (wt)	CAS Reg. #
Dimethoate	43.5%	60-51-5
*Ingredients not specifically listed are non-hazardous and are considered to be confidential business information under 29 CFR 1910.1200(j).		
See Section 8 for exposure limits.		

SECTION 4: FIRST AID MEASURES	
<b>Inhalation:</b>	Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
<b>Ingestion:</b>	Seek medical attention or call a poison control center immediately for treatment advice. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>Eyes:</b>	Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention immediately.
<b>Skin:</b>	Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Call a doctor or poison control center for treatment advice.
<b>Note to Physician:</b> Dimethoate is an acetyl cholinesterase inhibitor. Atropine is antidotal. 2-PAM may be effective as an adjunct to atropine. Contains petroleum distillate – vomiting may cause aspiration pneumonia.	

SECTION 5: FIRE FIGHTING MEASURES
<b>Suitable Extinguishing Media:</b> Foam, carbon dioxide, dry chemical, or water spray.
<b>Special Fire Fighting Procedures:</b> Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.
<b>Hazardous Combustion Products:</b> Oxides of nitrogen, sulfur, carbon and phosphorous
<b>Unusual Fire and Explosion Hazards:</b> 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 and explosion and fire. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

**Environmental Precautions:** This pesticide is toxic to wildlife and aquatic invertebrates. Keep spilled product from entering sewers or waterways.

**Methods for Containment:** Contain spilled product by diking area with sand or earth.

**Methods for Clean-up:** Cover contained spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Do not use combustible materials such as sawdust. Scoop, or sweep up material and place in a container for disposal. Do not place spilled material back in original container.

**Other Information:** Spills of this product may require reporting under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as the product contains Dimethoate with a reportable quantity (RQ) of 10 lbs. See Section 15 for additional information.

**SECTION 7: HANDLING AND STORAGE**

**Handling:** RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the pesticide product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**Storage:** Store in a dry location away from children, animals, foods, feeds, and other agricultural chemicals. Keep container closed when not using. Do not allow water into container as this may cause deterioration of product. Do not store under conditions where temperatures may exceed 120°F or be below 45°F. Keep storage area locked when not in use. **See pesticide product label for additional storage information.**

**Minimum Storage Temperature:** 45°F

**Other Precautions:** Consult Federal, state and local laws and regulations pertaining to storage.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure Guidelines			
Component:	OSHA PEL	ACGIH TLV	NIOSH REL
Dimethoate		0.1 mg/m <sup>3</sup>	

**NOTE TO END USERS:** PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING LISTED IN THIS SECTION IS FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD REFER TO THE PESTICIDE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING.

**Respiratory Protection:** Where airborne exposure to concentrations greater than the above listed exposure limits is likely, use a NIOSH approved respirator with cartridges/canisters approved for pesticides.

**Engineering Controls:** **Local Exhaust:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

**Protective Gloves:** Wear chemical resistant gloves to prevent skin exposure.

**Eye Protection:** Wear chemical goggles or safety glasses and full-face shield. Contact lenses are not eye protective devices. An emergency eyewash or water supply should be readily accessible to the work area.

**Other Protective Clothing or Equipment:** Wear long sleeve shirt, long pants and chemical resistant shoes plus socks to prevent skin exposure.

**Work/Hygienic Practices:** Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	Specific Gravity (H <sub>2</sub> O=1):	1.104 (typical)
Vapor Pressure (mm Hg):	3.9 at 20°C (68°F)	Density (lbs/gallon):	9.21 lbs/gallon (typical)
Vapor Density (Air=1):	34	Melting Point/Freezing Point:	Not determined
Solubility in Water (wt %):	Emulsifies	Boiling Point/Range:	313°F (156°C)
Viscosity:	Not determined	pH:	2.5 – 5.0
Appearance and odor:	Yellow liquid with slight solvent odor	Flash Point:	>100°F

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** None known  
**Chemical Stability:** Product is stable at ambient temperature and pressure, under normal storage and handling conditions. It is strongly advised not to heat this product above 95°F.  
**Possibility of Hazardous Reactions:** Will not occur  
**Conditions to Avoid:** Avoid extreme temperatures, flame or sparks.  
**Incompatible Materials:** Strong bases, strong oxidizers and amines  
**Hazardous Decomposition Products:** Oxides of nitrogen, sulfur, carbon and phosphorous

## SECTION 11: TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY**

**Eye Effects:** May cause substantial irritation with redness, stinging and tearing but effects should be temporary.  
**Skin Effects:** LD50 >2,020 mg/kg (rabbit); Slight irritant; Non-sensitizer  
**Acute Inhalation Effects:** LC50 = 5.42 mg/L (rat)  
**Acute Oral Effects:** Estimated LD50 = 345 mg/kg (rat)  
**Specific Target Organ Toxicity:** Central nervous system

**CHRONIC TOXICITY**

**Chronic Effects:** Cholinesterase inhibitor  
**Carcinogenicity:** No components are anticipated to have carcinogenic effects.  
**Mutagenicity:** Dimethoate is mutagenic in bacterial tests, but not in mammalian cells or in in vivo tests.  
**Teratogenicity:** No components are anticipated to have teratogenic effects.  
**Reproductive Toxicity:** No components are anticipated to have effects on the reproductive system.

**POTENTIAL HEALTH EFFECTS:**

**Eyes:** Causes moderate but temporary eye irritation.  
**Skin:** Causes skin irritation.  
**Inhalation:** Single exposure to vapors is not likely to be hazardous.  
**Ingestion:** May be fatal if swallowed.

## SECTION 12: ECOLOGICAL INFORMATION

**ENVIRONMENTAL SUMMARY:** This pesticide is toxic to wildlife and aquatic invertebrates.

**ECOTOXICITY DATA:**

**Fish Acute and Prolonged Toxicity:** Rainbow trout (*Salmo gairdneri*) 96-hr LC50 = 30.2 ppm (technical dimethoate)  
**Aquatic Invertebrate Acute Toxicity:** *Daphnia magna* 48-hr LC50 = 2.5 ppm (technical dimethoate)  
**Aquatic Plant Toxicity:** Not determined  
**Bird Acute and Prolonged Toxicity:** Mallard duck (male) acute oral LD50 = 41.7 mg/kg (technical dimethoate)  
**Honeybee Toxicity:** Highly toxic to bees

**ENVIRONMENTAL EFFECTS:**

**Soil Absorption/Mobility:** Not determined  
**Persistence and degradability:** Not determined  
**Bioaccumulative Potential:** Not determined  
**Other adverse effects:** None known.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste:** Dispose of in accordance with applicable Federal, state and local laws and regulations.  
**Container:** Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations.  
**See pesticide product label for full instructions on disposal.**  
**RCRA Characteristics:** It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** For packages of less than 119 gallons:  
**(Ground)** UN3017, Organophosphorous pesticides, Liquid, Toxic, Flammable (Dimethoate/Cyclohexanone), 6.1 (3), PG III, RQ (Dimethoate)  
 For packages of 119 gallons or greater:  
 UN3017, Organophosphorous pesticides, Liquid, Toxic, Flammable (Dimethoate/Cyclohexanone), 6.1 (3), PG III, RQ (Dimethoate), Marine Pollutant

**IMDG:** Not determined  
**(Sea)**

**IATA:** Not determined  
**(Air)**

**TDG:** Not determined  
**(Canada)**

**SECTION 15: REGULATORY INFORMATION**

**TSCA Inventory:** This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.  
**SARA Title III Information:**  
**Section 302 - Extremely hazardous substances:** None listed  
**Section 311/312 - Hazard Categories:** Immediate (Acute); Delayed (Chronic); Fire  
**Section 313 -** The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:  
 Dimethoate (CAS # 60-51-5)

**CERCLA -** This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):  
 Dimethoate (CAS # 60-51-5) has an RQ of 10 lbs (reached with 2.5 gallons of product)

**EPA Registration Information:** This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**WARNING**  
 May be fatal if swallowed.  
 Causes substantial but temporary eye injury.  
 Do not get in eyes or on clothing.  
 Harmful if absorbed through skin. Avoid contact with skin.

**California Proposition 65:** This product does not contain any components known to the state of California to cause cancer and/or reproductive harm.

**U.S. State Worker and Community Right-To-Know (RTK) Information (CT, IL, MA, MN, NH, NJ, PA, RI):**

Chemical Name	CAS #	State(s)
Dimethoate	60-51-5	NJ, PA

**Canadian Domestic Substances List:** Not determined

**WHMIS Classification:** This product is not approved for use in Canada. WHMIS classification is not determined.

**SECTION 16: OTHER**

**Disclaimer:** The information presented herein is based on available data from reliable sources and is correct to the best of WinField Solutions' knowledge. WinField Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

**Revision Date:** May 29, 2015      **Supersedes document dated:** February 19, 2015

**Sections Revised:** 2,5,8,9,10,11