

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Methomyl 5G Granules  
**EPA Reg. No.:** 57242-2  
**Synonyms:** Methomyl: S-methyl N-((methylcarbamoyl)oxy) thioacetimidate  
**Product Type:** Carbamate Insecticide

**Company Name:** Glades Formulating Corporation  
P.O. Box 1690  
Belle Glade, FL 33430-6286

**Telephone Numbers:** **Transportation Information:** Chemtrec 1-800-424-9300  
**Medical Emergency:** 1-800-222-1222  
**Product Information:** 561-996-4200

**Date of Issue:** September 7, 2010  
**Supersedes:** All previous versions  
**Sections Revised:** New or updated information in all sections.

**2. HAZARDS IDENTIFICATION****Emergency Overview:**

**Appearance and Odor:** Tan colored granules with a characteristic odor.

**Warning Statements:** WARNING. Keep out of reach of children. May be fatal if swallowed or absorbed through the skin. Harmful if inhaled. Causes moderate eye irritation. Do not get in eyes, on skin or on clothing. Avoid breathing dust.

**Potential Health Effects:**

**Likely Routes of Exposure:** Inhalation, eye and skin contact.

**Eye Contact:** Moderately irritating based on toxicity studies. Dusts may cause irritation.

**Skin Contact:** Slightly toxic and non-irritating based on toxicity studies.

**Ingestion:** Moderately toxic based on toxicity studies.

**Inhalation:** Moderately toxic based on toxicity studies. Dusts may irritate the upper respiratory tract.

**Medical Conditions Aggravated by Exposure:** Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease. Methomyl poisoning produces effects associated with anticholinesterase activity which may induce weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse and muscle tremors.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

**Potential Environmental Effects:**

This product is toxic to fish, aquatic invertebrates and mammals. Runoff may be hazardous to aquatic organisms in neighboring areas.

See Section 12: ECOLOGICAL INFORMATION for more information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Methomyl	16752-77-5	5.0
Other Ingredients Including: Crystalline silica as quartz	14808-60-7	95.0

### 4. FIRST AID MEASURES

**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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

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

**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.

**Note to Physician:** Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg intravenously every 10 to 30 minutes, until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

**Warning Symptoms:** Methomyl poisoning produces effects associated with anticholinesterase activity which may induce weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse and muscle tremors.

### 5. FIRE FIGHTING MEASURES

**Flash Point:** Not applicable

**Autoignition Temperature:** Not applicable

**Flammability Limits:** Not applicable

**Extinguishing Media:** Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

**Special Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA-approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

**Unusual Fire and Explosion Hazards:** If water is used to fight fire, contain runoff using dikes to prevent contamination of water supplies. Dispose of fire control water later.

**Hazardous Decomposition Materials (Under Fire Conditions):** May produce gases such as hydrogen cyanide and methylisocyanate and oxides of carbon, nitrogen and sulfur.

#### National Fire Protection Association (NFPA) Hazard Rating:

**Rating for this Product:** Health: 2    Flammability: 1    Reactivity: 0

Hazards Scale: 0 = Minimal    1 = Slight    2 = Moderate    3 = Serious    4 = Severe

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear appropriate protective gear for the situation. See *Personal Protection* information in Section 8.

**Environmental Precautions:** Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

**Methods for Containment:** Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

**Methods for Cleanup and Disposal:** Avoid creation of dusty conditions. If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Decontaminate tools and equipment following cleanup. See *Section 13: DISPOSAL CONSIDERATIONS* for more information.

**Other Information:** Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

## 7. HANDLING AND STORAGE

### Handling:

Do not get in eyes, on skin or on clothing. Avoid breathing dust. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside; then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### Storage:

Do not contaminate water, food, or feed by storage or disposal. Keep all product in original containers in a locked storage area. Store in a dry, cool area. Moisture may ruin product. Reseal partial bags with tape to prevent moisture accumulation. Do not use in and around the home.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

### Personal Protective Equipment:

**Eye/Face Protection:** To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

**Skin Protection:** To avoid contact with skin wear coveralls over short-sleeved shirt and short pants, chemical-resistant footwear plus socks and chemical-resistant gloves. Wear chemical-resistant headgear for overhead exposure. When cleaning equipment, mixing or loading wear chemical-resistant apron. An emergency shower or water supply should be readily accessible to the work area.

**Respiratory Protection:** Not normally required. If vapors, mists or dusts exceed acceptable levels, wear NIOSH-approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

**General Hygiene Considerations:** Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Methomyl	NE	NE	2.5	NE	mg/m <sup>3</sup>
Crystalline silica as quartz	10 (R)	NE	0.025 (R)	NE	mg/m <sup>3</sup>

R = Respirable Fraction

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance and Odor:** Tan colored granules with a characteristic odor.**Boiling Point:** Not applicable**Solubility in Water:** Not soluble**Density:** 40 - 50 pounds/cubic foot**Specific Gravity:** Not applicable**Evaporation Rate:** Not applicable**Vapor Density:** Not applicable**Freezing Point:** Not applicable**Vapor Pressure:** Not applicable**pH:** Not applicable**Viscosity:** Not applicable

**Note:** Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY**Chemical Stability:** This material is stable under normal handling and storage conditions.**Conditions to Avoid:** Excessive heat; do not store near heat or flame. Moisture may ruin product.**Incompatible Materials:** Strong oxidizing agents, bases and acids.**Hazardous Decomposition Products:** Under fire conditions, may produce gases such as hydrogen cyanide and methylisocyanate and oxides of carbon, nitrogen and sulfur.**Hazardous Reactions:** Hazardous polymerization will not occur.11. TOXICOLOGICAL INFORMATIONToxicological Data:

Except as noted below, data are derived from laboratory studies on Technical Methomyl:

**Oral:** Rat LD<sub>50</sub>: 354 mg/kg (female) (data derived from this product)**Dermal:** Rabbit LD<sub>50</sub>: >2,000 mg/kg**Inhalation:** Rat 4-hr LC<sub>50</sub>: 0.258 mg/kg**Eye Irritation:** Rabbit: Moderately irritating (data derived from this product)**Skin Irritation:** Rabbit: No irritation**Skin Sensitization:** Not a contact sensitizer in guinea pigs following repeated skin exposure.

**Symptoms of Cholinesterase Inhibition:** Signs and symptoms of cholinesterase inhibition may include, but may not be limited to: headache, dizziness, incoordination, muscle twitching, weakness, nausea, vomiting, diarrhea, constriction of the pupil of the eye, blurred or dark vision, excessive salivation or nasal discharge, profuse sweating and abdominal cramps.

**Subchronic (Target Organ) Effects:** Repeated overexposure to methomyl may affect lungs, skin, eyes, gastrointestinal tract, kidneys and spleen and signs and symptoms associated with cholinesterase inhibition.

**Carcinogenicity/Chronic Health Effects:** Prolonged overexposure to methomyl can cause effects to kidneys and the spleen. Methomyl did not cause cancer in laboratory animal studies. The carrier for this product is not listed as a carcinogen. However, it may contain crystalline silica (e.g. quartz), a naturally occurring component. Inhalation of

crystalline silica may cause pulmonary fibrosis (silicosis). Crystalline silica has been classified by IARC as carcinogenic to humans (Group 1), by the U.S. National Toxicological Program as a known human carcinogen and by ACGIH as a suspected human carcinogen (A2).

**Reproductive Toxicity:** Animal tests with methomyl did not cause reproductive toxicity.

**Developmental Toxicity:** Animal tests with methomyl did not cause development toxicity.

**Genotoxicity:** Methomyl did not produce genetic damage in animals or in bacterial and mammalian cell cultures.

**Assessment of Carcinogenicity:**

This product contains substances that are considered to be probable or suspected human carcinogens as follows:

Component	Regulatory Agency Listing As Carcinogen			
	ACGIH	IARC	NTP	OSHA
Crystalline Silica, Quartz	A2	1	Known	NO

See Section 2: HAZARDS IDENTIFICATION for more information.

## **12. ECOLOGICAL INFORMATION**

**Ecotoxicity:**

Data on Methomyl Technical:

96-hour LC <sub>50</sub> Rainbow Trout:	1.6 mg/L	Bobwhite Quail Oral LD <sub>50</sub> :	24.2 mg/kg
96-hour LC <sub>50</sub> Bluegill Sunfish:	1.05 mg/L	Mallard Duck Oral LD <sub>50</sub> :	15.9 mg/kg
96-hour LC <sub>50</sub> Daphnia:	0.0076 – 0.0317 ppm	Bobwhite Quail 5-day Dietary LC <sub>50</sub> :	1,000 ppm
48-hour Honey Bee Contact LD <sub>50</sub> :	<0.5 ug/bee	Mallard Duck 5-day Dietary LC <sub>50</sub> :	2,883 ppm

**Environmental Fate:**

Methomyl is moderately persistent and highly mobile. It is stable to hydrolysis at lower pHs (neutral to acidic) and degrades slowly in alkaline conditions. Methomyl photolyzes quickly in water but more slowly in soils. It is moderately stable to aerobic soil metabolism with a typical half-life of 30 to 45 days, but degrades more rapidly under anaerobic conditions with a typical half-life of <8 days. In laboratory studies, methomyl does not readily adsorb to soil and has the potential to be very mobile. Methomyl is unlikely to bioconcentrate in aquatic systems.

## **13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:**

Pesticide wastes may be acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Handling and Disposal:**

Completely empty bag into application equipment; then dispose of empty bag in a sanitary landfill.

## **14. TRANSPORTATION INFORMATION**

Follow the precautions indicated in *Section 7: HANDLING AND STORAGE* of this MSDS.

**DOT**

**Proper Shipping Name:** Carbamate Pesticide, Solid, Toxic, N.O.S.

**Hazard Class:** 6.1

**UN No.:** UN 2757

**Packing Group:** III

**Special Information:** Poison

**15. REGULATORY INFORMATION****U.S. Federal Regulations:**

**TSCA Inventory:** This product is exempt from TSCA because it is solely for FIFRA-regulated use.

**SARA Hazard Notification/Reporting:**

**Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):**

Acute

**Section 302: Threshold Planning Quantity:**

Methomyl (CAS No. 16752-77-5) 500/10,000 pounds

**Section 313 Toxic Chemical(s):**

None

**Reportable Quantity (RQ) under U.S. CERCLA:**

Methomyl (CAS No. 16752-77-5) 100 pounds

**RCRA Waste Code:**

Methomyl (CAS No. 16752-77-5) P066

**State Information:**

Other state regulations may apply. Check individual state requirements.

**California Proposition 65:** WARNING. This product contains chemicals known to the State of California to cause cancer.

**16. OTHER INFORMATION**

The information provided herein was believed to be accurate at the time of preparation from a compilation of sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling, storage and use of this product and to determine the suitability of the product for its intended use. It is a violation of Federal law to use this product in a manner inconsistent with applicable law.