

**1. IDENTIFICATION**

**Date of issue:** May 2015  
**Product Name:** Carbaryl 5% Dust  
**Recommended Use:** Insecticide  
**EPA Registration No.:** 829-128  
**Chemical Name of Active Ingredient:** 1-Naphthyl Methylcarbamate, (Carbaryl)  
**Use:** Insecticide  
**Restrictions on use:** See product label for restrictions.  
**Company:** Southern Agricultural Insecticides, Inc  
P.O. Box 218  
Palmetto, FL 34220  
(941) 722-3285

For fire, spill, and/or leak emergencies: Chemtrec (800) 424-9300 (24 hour transportation spill response)  
For medical emergencies and health/safety information: Poison Control Center: 1-800-222-1222  
Contact Safety Call® International for emergency medical treatment at (866) 897-8050.

**2. HAZARD(S) IDENTIFICATION**

**Classification in accordance with regulation HCS 29CFR §191 0.1200**

**Carcinogenicity:** Category 2

**Label elements:**

**Hazard pictograms:**



**Signal word:** Warning  
**Hazard statements:** Suspected of causing cancer.  
**Precautionary statements:** Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Wear protective gloves! protective clothing! eye protection! face protection.  
IF exposed or concerned: Get medical advice! attention.  
Store locked up.  
Dispose of contents/container in accordance with local regulation.  
**Other hazards:** This product contains an cholinesterase inhibitor.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component Name	CAS-No.	Concentration by weight
Carbaryl	63-25-2	5.00
Pyrophyllite	12269-78-2	95

**4. FIRST AID MEASURES****Description of first aid measures**

**General advice:** When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.  
**Inhalation:** Move 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 physician or poison control center immediately.

Skin contact: Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.

Ingestion: Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

### **Most important symptoms and effects, both acute and delayed**

Temporary blurred vision due to contraction of the pupils (miosis) following contact with the eyes., Bradycardia, Low blood pressure, Salivation, Bronchial hypersecretion, Vomiting, Diarrhoea, Sweating, Muscular fasciculation, Spasm, Breathing difficulties, Respiratory paralysis, Somnolence, Coma, Respiratory failure, Hypothermia, Convulsions, Nausea

### **Indication of any immediate medical attention and special treatment needed**

Risks: This product is a cholinesterase inhibitor carbamate.

Treatment: The product inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves.

The following antidote is generally accepted: atropine.

Do not use oximes such as 2-PAM unless organophosphate intoxication is suspected. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 24-48 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically.

Contraindications: derivatives of morphine.

## **5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable: Water spray, Foam, Dry chemical, Carbon dioxide (CO<sub>2</sub>)

Unsuitable: None known.

Special hazards arising from the substance or mixture:

Dangerous gases are evolved in the event of a fire.

### **Advice for firefighters:**

Special protective equipment for fire-fighters: Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information: Cool closed containers exposed to fire with water spray. Fight fire from upwind position. Keep out of smoke. Do not allow run-off from fire fighting to enter drains or water courses. Whenever possible, contain fire-fighting water by diking area with sand or earth.

Flash point: not applicable

Autoignition temperature: no data available

Lower explosion limit: no data available

Upper explosion limit: no data available

Explosivity: not applicable

Dust explosion class: no data available

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions, protective equipment and emergency procedures:**

Wear a NIOSH or MSHA approved respirator if dust will be generated in clean-up. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains, streams or other bodies of water. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up:**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## Reference to other sections

Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

**7. HANDLING AND STORAGE**

## Precautions for safe handling

Advice for safe handling: Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation. Handle and open container in a manner as to prevent spillage.

## Hygiene measures:

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.  
Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

**Conditions for safe storage, including any incompatibilities**

Requirements for storage Store in a cool, dry place and in such a manner as to prevent cross contamination with other products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Components	CAS-No	Control Parameters	Basis
Carbaryl (Inhalable fraction and vapor.)	63-25-2	0.5 m 1m3	ACGIH
Carbaryl	63-25-2	5 mg/m3	NIOSH
Carbaryl	(REL) (PEL)	5 mg/m3	OSHAZ1
Carbaryl	(TWA)	5 mg/m3	OSHAZ1A
pyrophyllite	12269-78-2 TWA	5 mg/m3 (Respirable dust.)	OSHA PEL

**Exposure controls****Personal protective equipment**

In normal use and handling conditions please refer to the label. In all other cases the following recommendations would apply.

**Respiratory protection**

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.  
Under conditions immediately dangerous to life or health, or emergency conditions with unknown concentrations, use a full-face positive pressure air-supplied respirator equipped with an emergency escape air supply unit or use a self-contained breathing apparatus unit.

Hand protection:	Chemical resistant nitrile rubber gloves
Eye protection:	Safety glasses with side-shields
Skin and body protection:	Wear long-sleeved shirt and long pants and shoes plus socks.
General protective measures:	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white
Physical State:	powder
Odor	chemical odor
Odor Threshold	no data available
pH	no data available
Vapor Pressure	(mmHg)0.002*
Vapor Density (Air = 1)	Not Applicable
Bulk density	approximately 70 lb/ft <sup>3</sup>
Evaporation rate	Not Applicable
Boiling Point	Not Applicable
Melting   Freezing Point	Not Applicable
Water solubility	soluble
Minimum Ignition Energy	no data available
Decomposition temperature	no data available
Partition coefficient: n-octanol/water	no data available
Viscosity	
Flash point	
Autoignition temperature	no data available
Lower explosion limit	Not Applicable
Upper explosion limit	Not Applicable
Explosivity	no data available
Dust explosion class	no data available

## 10. STABILITY AND REACTIVITY

### Reactivity

<b>Thermal decomposition</b>	no data available
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	No hazardous reactions when stored and handled according to prescribed instructions.
<b>Conditions to avoid</b>	Elevated temperatures. Heat, flames and sparks
<b>Incompatible materials</b>	Strong acids, Bases
<b>Hazardous decomposition products</b>	Thermal decomposition can lead to release of: Nitrogen oxides (NO <sub>x</sub> ) Carbon oxides Methyl isocyanate (trace; no adverse effects expected)

## 11. TOXICOLOGICAL INFORMATION

<b>Exposure routes</b>	Ingestion, Inhalation, Eye contact, Skin Absorption
<b>Immediate Effects</b>	
<b>Eye</b>	Causes eye irritation.
<b>Skin</b>	Harmful if absorbed through skin. May produce symptoms similar to those from ingestion.
<b>Ingestion</b>	Harmful if swallowed. This product causes reversible cholinesterase inhibition without long term effects. Repeated overexposure may cause more severe cholinesterase inhibition with more pronounced symptoms. May lead to rapid onset of nausea, vomiting, diarrhea, abdominal pain, involuntary shaking, excess salivation, pinpoint pupils, blurred vision, profuse sweating, temporary paralysis, respiratory depression, and convulsions.

Inhalation Harmful if inhaled. May produce symptoms similar to those from ingestion.

### Information on toxicological effects

**Acute oral toxicity** LD50 (male rat) 3,310 mg/kg  
LD50 (female rat) 2,330 mg/kg  
LD50 (male/female combined rat) 3,240 mg/kg

Acute inhalation toxicity LC50 (rat) > 4.9 mg/l  
Exposure time: 4 h  
Determined in the form of dust.

LC50 (rat) > 19.6 mg/l  
Exposure time: 1 h  
Determined in the form of dust.  
Extrapolated from the 4 hr LC50.

Acute dermal toxicity LD50 (rabbit) > 2,000 mg/kg  
Skin irritation No skin irritation (rabbit)  
Eye irritation Mild eye irritation. (rabbit)  
Sensitisation Non-sensitizing. (guinea pig)

### Assessment repeated dose toxicity

Carbaryl caused reversible cholinesterase inhibition without long term effects in animal studies.

### Assessment Mutagenicity

Carbaryl was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

### Assessment Carcinogenicity

Carbaryl caused at high dose levels an increased incidence of tumours in the following organ(s): liver, Thyroid, kidneys, cardio-vascular system. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use conditions.

Carbaryl	ACGIH	IARC
	Group A4	Overall evaluation: 3

**Assessment toxicity to reproduction** Carbaryl did not cause reproductive toxicity in a two-generation study in rats.

**Assessment developmental toxicity** Carbaryl did not cause developmental toxicity in rats and rabbits.

## 12. ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 3.3 mg/l  
Exposure time: 96 h

The value mentioned relates to the active ingredient carbaryl.

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 0.0164 mg/l  
Exposure time: 48 h

The value mentioned relates to the active ingredient carbaryl.

Toxicity to aquatic plants EC50 (Pseudokirchneriella subcapitata) 1.75 mg/l  
Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient carbaryl.

Biodegradability Carbaryl: ; rapidly biodegradable

Koc Carbaryl: Koc: 624

Bioaccumulation Carbaryl: Bioconcentration factor (BCF) 44; Does not bioaccumulate.

Mobility in soil Carbaryl: Slightly mobile in soils

Environmental precautions Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.

Apply this product as specified on the label. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

<b>Product</b>	It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Never place unused product down any indoor or outdoor drain.
<b>Contaminated packaging</b>	Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. If burned, stay out of smoke. Follow advice on product label.
<b>RCRA Information</b>	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

### 14. TRANSPORT INFORMATION

#### 49CFR

UN number	3077
Class	9
Packaging group	III
Marine pollutant	Marine pollutant
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S. (CARBARYL)
RQ	Reportable Quantity is reached with 2,000 lb of product.

#### IMDG

UN number	3077
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CARBARYL MIXTURE)

#### IATA

UN number	3077
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CARBARYL MIXTURE)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

### 15. REGULATORY INFORMATION

#### US Federal Regulations

##### TSCA list

Carbaryl 63-25-2

#### US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

#### SARA Title III • Section 302 - Notification and Information

None.

#### SARA Title III• Section 313• Toxic Chemical Release Reporting

Carbaryl 63-25-2

#### US States Regulatory Reporting

##### CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Carbaryl 63-25-2

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Carbaryl 63-25-2 Developmental toxin.  
Carbaryl 63-25-2 Male reproductive toxin.

**US State Right-To-Know Ingredients**

Carbaryl CA, CT, IL, MN, NJ, RI

**Environmental**

**CERCLA**

Carbaryl 63-25-2 100lbs

**Clean Water Section 307 Priority Pollutants**

None.

**Safe Drinking Water Act Maximum Contaminant Levels**

None.

**EPA/FIFRA 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 required on the pesticide label:

Signal word: Caution  
Hazard statements: Harmful if swallowed.  
Harmful if absorbed through skin.  
Harmful if inhaled.  
Avoid contact with skin, eyes and clothing.  
Avoid breathing dust.

**16. OTHER INFORMATION**

**NFPA 704 (National Fire Protection Association):**

Health - 1 Flammability - 1 Instability - 1

**HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)**

Health - 1 Flammability - 1 Physical Hazard - 1 PPE -

0= minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Southern Agricultural Insecticides, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Southern Agricultural Insecticides, Inc has been advised of the possibility of such damages.