Material Safety Data Sheet
DOUGLAS MAX KILL VAPOCIDE®

Section 1. Product and Company Identification

Product Name: DOUGLAS MAX KILL VAPOCIDE®
Product Code: A-F-VAP-OCIDE-02X02G, A-F-VAP-OCIDE-01X05G, and A-F-VAP-OCIDE-01X55G
EPA Registration #: 1015-68
Effective Date: **March 20, 2009**

Manufacturer Information: Douglas Products and Packaging Company
1550 East Old 210 Highway
Liberty, Missouri 64068
Information Phone: (816) 781-4250
Emergency Phone: Chemtrec (800) 424-9300

Section 2. Ingredients and Hazards Identification

Hazardous Components		**Occupational Exposure Limits**			
Component	**CAS Number**	**OSHA PEL**	**ACGIH TLV**	**Weight Percent**	**Section 313**
Petroleum distillates	64742-95-6	2000	350	$\leq$ 95.0	Yes
Dichlorvos	62-73-7	50 mg/m^3	50 mg/m^3	$\leq$ 5.0	Yes
This product contains the following EPCRA Section 313 chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).					

Potential Acute Health Effects:
Eyes: Causes eye irritation and twitching.
Skin: May cause sweating and twitching on the skin
Inhalation: Vapors may cause respiratory depression
Ingestion: Harmful if swallowed.
Note to physician: This product is a cholinesterase inhibitor. The suggested antidotes are atropine sulfate and 2-PAM. Observe for 48 hours. The half-life recovery for an exposed person is four to six weeks. Caution should be used sending the exposed person back to the same position and job description.

Section 3. Hazard Identification

Caution: Ingestion of product may be harmful. Avoid contact with skin, eyes and clothing. Avoid inhalation of spray dusts. Avoid ignition sources.
Immediate Health Effects:
Eye Contact with the eyes causes moderate irritation.
Skin: Contact with the skin is expected to cause a sweating and twitching sensation on face, eyes and mouth.
Ingestion: Can cause depression of the central nervous system such as fatigue, dizziness, headaches, lack of coordination, tremors, and unconsciousness.
Inhalation: The dusts from this product may cause depression of breathing. Breathing this material at concentrations above the recommended exposure limits may cause severe depression of the central nervous system.
Delayed or other Health Effects:
Contain material that may cause adverse reproductive effects on animal data.
Target Organs: May cause damage to the central nervous system and eventually death.

Section 4. First Aid Measures

Eye Contact: Flush eyes with water immediately while holding eyelids open. Remove contacts, if worn, after initial flushing and continue flushing for at least 15 minutes. Seek medical attention.
Skin Contact: Use soap and water to remove from the skin, remove contaminated clothing, clean thoroughly before reuse. Rinse skin for 15-20 minutes. If irritation persists seek medical attention.

Inhalation: Move to fresh air. If not breathing, give rescue breathing. If breathing is difficult give oxygen. Seek medical attention if breathing is still difficult.
Ingestion: If swallowed, get medical attention immediately. DO INDUCE VOMITING after the patient taking 1-3 glasses of water. Never give anything by mouth to an unconscious pers0on. Seek medical attention.

Section 5. Fire Fighting Measures

Flash Point: NA
Flammability Limits: None established.
Fire Fighting Media: Dry chemical, carbon dioxide, AFFF foam or alcohol resistant foam.
Special Fire Fighting Procedures: Fight from upwind. First responders need to wear full-bunker gear with SCBA, never enter a confined space unless fully protected with proper personal protective equipment (PPE).

Section 6. Accidental Release Measures

Clean-up Procedures: Wear proper PPE. Stop the source of the spill if you are not put at risk.
Spills and Leaks: Dispose in accordance to local, state or federal regulations.

Section 7. Handling and Storage

Handling: Do not use create dust near an open flames or any ignition sources. Avoid contact with skin, eyes and clothing. Avoid breathing the dust. Handle in well-ventilated area with proper PPE.
Storage: Store in original labeled container. Keep in cool and dry areas. Keep away from children, animals and food.

Section 8. Exposure Control/Personal Protection

Introductory Remarks: Make sure there is adequate ventilation when handling this product. Control over exposure to airborne levels above recommended exposure limits.
Personal Protection:
Eyes: Wear safety goggles or safety glasses to prevent eye contact.
Body: Long sleeve shirts, long pants, socks, rubber boots and chemical resistant gloves.
Hands: Chemical resistant gloves
Respiratory: Wear an approved respirator or approved pesticide dust mask that provides protection from this product if the PEL is exceeded.
*Other: M*ake sure to wash hands, clothing and PPE with 1:2 household bleach and water.

Section 9. Physical and Chemical Properties

Odor	Aromatic Solvent Odor	**Vapor Pressure**	5.1mm Hg
Color	Colorless to Amber	**% Volatiles by Volume**	NA
Physical State	Liquid	**Specific Gravity (H_2O=1)**	.894
pH	NA	**Solubility**	Insoluble in water
Freezing Point	NA	**Boiling Point**	176 F to 340 F

Section 10. Stability and Reactivity

Chemical Stability: Considered stable under normal ambient temperatures**.** Avoid high temperatures
Hazardous Decomposition: At elevated temperatures one can get aldehydes, hydrogen sulfide, methyl mercaptan, dimethyl sulfide and oxides of carbon., sulfur and phosphorus.
Hazardous Polymerization: Will not occur
Incompatibility~ Materials to Avoid: May react with strong or strong oxidizers.

Section 11. Toxicological Information

Acute Eye Irritation: May be irritating.
Acute Skin Irritation: May cause minor irritation.
Acute Dermal Toxicity: Not irritating may be absorbed through the skin and become toxic.
Acute Oral Toxicity: Expected to be toxic with prolonged exposure.
Acute Inhalation Toxicity: Not acutely toxic, may be an toxic with prolonged breathing of the dust.
Carcinogenic Effects: None
Existing Medical Conditions Aggravated by Exposure: Routes of entry are inhalation, ingestion and dermal. Exposure to inhalation of the product may cause respiratory problems and depression of central nervous system and death.

Section 12. Ecological Information

Ecotoxicity: The product is toxic to fish and other aquatic organisms; this material should be kept out sewers, drainage systems and all bodies of water.
Environmental Fate: This product should be expected to be readily bio-degradable over time.

Section 13. Disposal Considerations

Waste Disposal Method: What ever cannot be saved for recovery or recycling should be managed by the local, state or Federal Regulations, product maybe still be applied by label directions..
Container Handling and Disposal: All containers should be triple rinsed and disposed of according to local, state and Federal regulations.

Section 14. Transport Information

D.O.T. Classification: Organo/Phosphorus Pesticides, Liquid, Toxic, Flammable, 6.1, Sub 5, Class 92.5, Poison 6
Shipping Name: DOUGLAS MAX KILL VAPOCIDE
Technical Shipping Name: RQ, Organophosphorus Pesticides, Liquid, Toxic, Flammable, 6.1 (3), UN3017, PGI, Item #45615, Sub 5, Class 92.5 (Vapocide 1x5G)
UNFIC: UN 3017
ID Number: 45617
Packaging Group: I
Labels: No US DOT Labels

Section 15. Regulatory Information

EPCRA 311/312 Categories:	Immediate (Acute) Health Effects:	Yes
	Delayed (Chronic) Health Effects:	Yes
	Fire Hazard:	Yes
	Sudden Release of Pressure	No
	Reactivity:	No

Right to know classification:.
SARA 311-312:
Reportable Quantity (RQ):
Section 302: Not listed
Section 313: Not listed

Abbreviations:

AICS	Australian Inventory of Chemical Substances
CAS #	Chemical Abstract Service Number
ºC	Celsius temperature scale
ºF	Fahrenheit temperature scale
ECL	Korean Existing Chemicals List

EEC	European Economic Commission
ENCS	Japanese Existing and New Chemical List
EINECS #	European Inventory of Existing Chemical Substances Number
EU	European Union
(Israel)	2001 proposed list of chemical substances to be regulated under Israel Hazardous Substances Law and Regulations List
MAC	Netherlands
MAK	Germany
MITI	Ministry of International trade and Industry
NA	Not applicable
PEL	Permissible Exposure Limit
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PPE	Personal Protective Equipment
Prop.	Proprietary
NA	Not applicable
ND	Not determined
STEL	Short Term Exposure Limit
SWISS	Giftliste 1
SWISS	Inventory of Notified New Substances
TDG	Transportation of Dangerous Goods (Canada)
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
(Taiwan)	List of Toxic Chemical Substances regulated under Taiwan Toxic Chemical Substances Control Act of 1086
USA	United States of America
UK	United Kingdom

Section 16. Other Information

Hazardous Material Information (HMIS) **National Fire Protection Association (NFPA)**

Health	4	2	Fire
Fire	2	1	Instability
Reactivity	1		
Personal Protection	K		

Health 4 Deadly 3 Extreme Danger 2 Dangerous 1 Slight hazard 0 No hazard
Fire 4 < 73 ºC 3 < 100 ºC 2 < 200 ºC 1 >200 ºC 0 Will not burn
Reactivity/Instability 4 – May detonate 3 Explosive 2 Unstable 1 Normally stable 0 Stable

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