

Reviewed on 07/01/2015

1 Identification

- · Product identifier
 - Trade name: Mesurol® 75-W Insecticide / Molluscicide EPA Registration No.:10163-231
 - · CAS Number: Active Ingredient: Methiocarb (75%), CAS:2032-65-7
 - · Relevant identified uses of the substance or mixture and uses advised against
 - · Sector of Use Ornamental
 - · Application of the substance / the mixture Agricultural Insecticide Miticide Molluscicide
- · Details of the supplier of the safety data sheet
 - · Manufacturer/Supplier:

Gowan Company P.O. Box 5569 Yuma, Arizona 85366-5569 (928) 783-8844

- · Information department: sds@gowanco.com
- · Emergency telephone number:

Chemtrec® Emergency Telephone 24 - Hours: (Spills, leak or fire) Inside U.S. & Canada: (800) 424-9300 Outside the U.S. & Canada: +011 (703) 527-3887

For medical emergency (Prosar®): (888) 478-0798

2 Hazard(s) identification

· Classification of the substance or mixture



GHS06 Skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.

- · Label elements
 - · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS06

- · Signal word: Danger
- · Hazard-determining components of labeling: mercaptodimethur (ISO)
- · Hazard statements

Fatal if swallowed.

· Precautionary statements

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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· Hazard description:

Fatal if swallowed. May be fatal if absorbed through skin or inhaled. Do not get in eyes, on skin or on clothing. Do not breath dust. For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). Wear coveralls worn over short-sleeved shirt and short pants, socks and chemical resistant footwear and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse.

- · Classification system:
 - · NFPA ratings (scale 0 4)



Health = 2 Fire = 0Reactivity = 0

HAZARD INDEX:

- 4 Severe Hazard
- 3 Serious Hazard
- 2 Moderate Hazard
- 1 Slight Hazard
- 0 Minimal Hazard
- · HMIS-ratings (scale 0 4)



HAZARD INDEX:

- 4 Severe Hazard
- 3 Serious Hazard
- 2 Moderate Hazard
- 1 Slight Hazard
- 0 Minimal Hazard
- · Other hazards
 - · Results of PBT and vPvB assessment
 - · **PBT**: Not applicable in US.
 - · vPvB: Not applicable in US.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
 - · Description: Only the identities of the active ingredient(s) and any hazardous inert ingredients are listed.

· Dangerous components:				
2032-65-7	mercaptodimethur (ISO)	75.0%		
	Acute Tox. 3, H301; 🔖 Aquatic Acute 1, H400; Aquatic Chronic 1, H410			
14807-96-6	Talc (Mg3H2(SiO3)4) ❖ Carc. 2, H351	<20.0%		
	🗞 Carc. 2, H351			
14808-60-7	Quartz (SiO2) © Carc. 1A, H350	<1.0%		
	♦ Carc. 1A, H350			

- US

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4 First-aid measures

· Description of first aid measures

· General information:

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

You may also contact 1-888-478-0798 for emergency medical treatment information.

· After inhalation:

- 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 poison control center or doctor for further treatment advice.

· After skin contact:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

· After eye contact:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes.
- Call a poison control center or doctor for treatment advice.

· After swallowing:

- 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 a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

· Information for doctor:

- · Most important symptoms and effects, both acute and delayed Unknown
- · Indication of any immediate medical attention and special treatment needed

ANTIDOTE - Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. This compound inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically. REPEATED OR PROLONGED EXPOSURE TO CHOLINESTERASE INHIBITORS SUCH AS ARE CONTAINED IN THIS PRODUCT MAY CAUSE SUSCEPTIBILITY TO ADVERSE EFFECTS FROM VERY SMALL DOSES OF ANY CHOLINESTERASE INHIBITOR.

5 Fire-fighting measures

- · Extinguishing media
 - · Suitable extinguishing agents: Water
- · Special hazards arising from the substance or mixture

Carbon monoxide (CO)

Methyl amines

Methyl mercaptan

· Advice for firefighters

During the routine handling of this material, there should be little risk of a dust explosion. However, tests on similar organic materials indicate that an explosive mixture can develop. Therefore, appropriate preventative measures should be taken. If a large dust cloud develops, turn off any devices that may cause a spark and leave the area until the cloud dissipates

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· Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Do not allow material to enter streams, sewers, or other waterways or contact vegetation.

Scrub contaminated area with detergent and bleach solution. Repeat. Rinse with water.

Use dry absorbent material such as clay granules to absorb and collect the wash solution for proper disposal.

Contaminated soil may have to be removed and disposed.

Place in covered container for reuse or disposal.

- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
 - · Precautions for safe handling

Fatal if swallowed. May be fatal if absorbed through skin or inhaled. Do not get in eyes, on skin or on clothing. Do not breath dust.

For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). Wear coveralls worn over short-sleeved shirt and short pants, socks and chemical resistant footwear and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse.

- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · Conditions for safe storage, including any incompatibilities
 - · Storage:
 - · Requirements to be met by storerooms and receptacles:

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

- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · Specific end use(s) Not applicable.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
 - · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information:

Fatal if swallowed. May be fatal if absorbed through skin or inhaled. Do not get in eyes, on skin or on clothing. Do not breath dust.

For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

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Wear coveralls worn over short-sleeved shirt and short pants, socks and chemical resistant footwear and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse.

· Exposure controls

- · Personal protective equipment:
 - · General protective and hygienic measures:
 - Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
 - Remove clothing 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.
 - · Breathing equipment:

For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides, or a canister approved for pesticides. For exposure outdoors, a dust/mist filtering respirator.

· Protection of hands:



Protective gloves

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection:

Applicators and other handlers must wear:

- · Coveralls over short-sleeved shirt and short pants
- Waterproof glove
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- · Chemical-resistant apron when cleaning equipment, mixing or loading.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

· Form: Powder

· Color: White to off-white

· Odor: Mild

· Odour threshold: Not determined.

• pH-value: 5.5-6.5

· Change in condition

• Melting point/Melting range: Undetermined. • Boiling point/Boiling range: Undetermined.

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· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not determined.
· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density at 20 °C (68 °F):	17.1 lbs/ft3
Relative density	Not determined.
· Vapour density	Not applicable.
Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
· Water:	Dispersible.
· Partition coefficient (n-octanol	/water): Not determined.
· Viscosity:	
· Dynamic:	Not applicable.
· Kinematic:	Not applicable.
Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity
 - · Chemical stability Stable under normal conditions
 - · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: Not applicable.
- · Hazardous decomposition products: CO, Methyl Amines, CH3NCO, Methyl mercaptan.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:

		values that are relevant for classification:
Oral	LD50	100 mg/kg (rat) (male)

60 mg/kg (rat) (female)

Dermal LD50 >2000 mg/kg (rat)

- Primary irritant effect:
 - \cdot on the skin: Mild irritation
 - · on the eye: Mild irritation

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· Sensitization: No sensitizing effects known.

· Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

· NTP (National Toxicology Program)

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

· Toxicity

This pesticide is toxic to fish, and very highly toxic to birds, mammals and honey bees exposed to direct treatment or residues on blooming shrubs, flowers, weeds and trees. Do not apply this product or allow it to drift to blooming shrubs, flowers, weeds, or trees if bees are visiting the treatment area.

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.
- · Results of PBT and vPvB assessment
 - · **PBT**: Not applicable.
 - · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
 - · Recommendation:

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

- · Uncleaned packagings:
 - · Recommendation:

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling, if available, or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

14 Transport information

- · UN-Number
 - · DOT, ADR, IMDG, IATA

UN2757

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· UN proper	shipping	name
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 $\cdot ADR$ 2757 Carbamate pesticides, solid, toxic (mercaptodimethur) · IMDG

CARBAMATE PESTICIDE, SOLID, TOXIC (mercaptodimethur),

MARINE POLLUTANT

 \cdot IATA CARBAMATE PESTICIDE, SOLID, TOXIC (mercaptodimethur)

· Transport hazard class(es)

· ADR, IATA



· Class 6.1 Toxic substances

 \cdot Label 6.1

· IMDG



· Class 6.1 Toxic substances

· Label

· Packing group

· ADR, IMDG, IATA III

· Environmental hazards: Product contains environmentally hazardous substances:

mercaptodimethur (ISO)

· Marine pollutant:

Symbol (fish and tree)

· Special precautions for user Warning: Toxic substances

· Danger code (Kemler): 60 · EMS Number: F-A,S-A

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable

· UN ''Model Regulation'': UN2757, Carbamate pesticides, solid, toxic (mercaptodimethur),

6.1, III

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture 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.

· SARA Title III

· Section 355 (extremely hazardous substances):

All ingredients are listed.

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· Section 313 (Specific toxic chemical listings):

All ingredients are listed.

· TSCA (Toxic Substances Control Act):

None of the ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· Carcinogenicity categories

· EPA (Environmental Protection Agency)

None of the ingredients are listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

· GHS label elements

Not applicable

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms

Not applicable

· Signal word:

(US EPA) DANGER - POISON

· Hazard-determining components of labeling:

mercaptodimethur (ISO)

· Hazard statements

Fatal if swallowed. May be fatal if absorbed through skin or inhaled. Do not get in eyes, on skin or on clothing. Do not breath dust. For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). Wear coveralls worn over short-sleeved shirt and short pants, socks and chemical resistant footwear and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse. Fatal if swallowed.

· Precautionary statements

KEEP OUT OF REACH OF CHILDREN

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

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If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Supply Chain
- · Contact: sds@gowanco.com
 - · Date of preparation / last revision 07/01/2015 / 5
 - · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 2: Acute toxicity, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Carc. 1A: Carcinogenicity, Hazard Category 1A

Carc. 2: Carcinogenicity, Hazard Category 2

 $A quatic\ Acute\ 1: Hazardous\ to\ the\ aquatic\ environment\ -\ Acute Hazard,\ Category\ 1$

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

- · Sources Mesurol® is a registered Trademark (Reg TM) of Bayer AG, Germany
- * Data compared to the previous version altered.

US