

Safety Data Sheet

1 IDENTIFICATION

Product Name:

Sectagon[®]-K54

Agricultural Fumigant

EPA Reg. No.:

61842-7

Chemical Family:

Dithiocarbamate salt solution

Manufacturer/Supplier:

Tessenderlo Kerley Inc.
 2255 N. 44th Street, Suite 300
 Phoenix, Arizona 85008-3279
 Information: (602) 889-8300

For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC[®]:

(800) 424-9300 (CHEMTREC)
 (866) 374-1975 (Tessenderlo Kerley)

2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

| Pictogram | Hazard Statements | Precautionary Statements |
|---|--|---|
|  | Causes severe skin burns and eye damage. | <p>Wash hands thoroughly after handling. Wear protective clothing and face protection. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local and State regulations.</p> |
|  | May be fatal if swallowed or inhaled. | <p>If swallowed: Immediately call a poison center. Do not eat, drink or smoke when using this product. Do not breathe vapors. Use only outdoors or in a well-ventilated area. Wear respiratory protection.</p> |
|  | May cause an allergic skin reaction. | <p>Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. If skin irritation or rash occurs: Get medical advice.</p> |

Signal word Danger

Hazard-determining components of labeling:

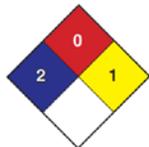
Metam potassium

2 HAZARD(S) IDENTIFICATION *(continued)*

Hazard description:

Prolonged exposure to air will result in gradual decomposition to form methyl isothiocyanate (MITC), which is poisonous.

NFPA Hazard Ratings



Health = 2
Fire = 0
Reactivity = 1

HMIS Ratings

| HMIS Ratings | | |
|--------------|---|----------------|
| HEALTH | 2 | Health = 2 |
| FIRE | 0 | Fire = 0 |
| REACTIVITY | 1 | Reactivity = 1 |

3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization: Mixture

Description: Soil fumigant (Restricted Us Pesticide)

| Active Ingredient: | Component | CAS No. | % by Weight |
|--------------------|---------------------------------|----------|-------------|
| | Potassium methyldithiocarbamate | 137-41-7 | 54 |

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. For medical emergencies involving this product, call toll free 1-866-374-1975. See Label for Additional Precautions and Directions for Use.

IF ON SKIN OR CLOTHING: 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.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 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.

IF INHALED: 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 a poison control center or doctor for further treatment advice.

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.

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage.

5 FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing agents:

Not flammable. Use firefighting measures that suit the environment.

Special hazards arising from the substance or mixture

Heating will cause the evolution of methyl isothiocyanate (MITC) and hydrogen sulfide, both of which are highly toxic and flammable gases. It is also conceivable that product breakdown from heating could release carbon disulfide and methylamine, which are also toxic and flammable.

Advice for firefighters

Protective equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode. Wear full protective suit.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment specified in Section 8. Isolate the release area and deny entry to unnecessary, unprotected and untrained personnel.

Environmental precautions:



Very toxic to aquatic life.

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13. Ensure adequate ventilation.

7 HANDLING and STORAGE

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Personnel must refer to the Product Label and Directions For Use attached to the product for agricultural use requirements in accordance with the EPA Worker Protection Standard.

Information about protection against explosions and fires:

Protect from heat.

Keep ignition sources away - Do not smoke.

Requirements to be met by storerooms and receptacles:

Store in a cool, dry, well ventilated area away from direct sunlight and any incompatible materials (see section 10).

Do not store at temperatures below 0°F as the product will crystallize at low temperatures. Warm or store at higher temperatures and mix to redissolve crystals before use.

Information about storage in one common storage facility:

Do not store together with acids.

Further information about storage conditions:

Protect from heat and direct sunlight.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with occupational exposure limits:

| Exposure Guidelines: | OSHA | | ACGIH | |
|----------------------|------------|----------------|------------|-------------|
| | <u>TWA</u> | <u>Ceiling</u> | <u>TLV</u> | <u>STEL</u> |
| Hydrogen sulfide: | None | 20 ppm | 10 | 15 |

Additional information:

This is a Restricted Use Pesticide (RUP). Personnel who handle this product in its end-use application should use this product only in accordance with its pesticide labeling and with the "Worker Protection Standard", 40 CFR 170.

Exposure controls

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION *(continued)*

Breathing equipment:

- A NIOSH-certified full-facepiece air-purifying respirator equipped with organic vapor (OV, NIOSH approval prefix TC-23C) cartridge and a particulate prefilter (Type N, R, P, or HE NIOSH approval number prefix TC-84A) or
- A gas mask with a canister approved for organic vapor (NIOSH approval number prefix TC-14G).

Cartridges or canisters must be replaced when odor or sensory irritation from this product becomes apparent during use, if the measured concentration of MITC is greater than 6000 ppb (6 ppm), or in the absence of any other instructions or indications of service life, at the end of each day's work period, whichever occurs first.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product.

Select glove material based on penetration times, rates of diffusion and degradation.

Material of gloves

Some materials that are chemical-resistant to this product are barrier laminate or viton ≥ 14 mils. For more options, follow the instructions for category H on the chemical-resistance category selection chart.

Penetration time of glove material

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

Eye protection:

Wear protective eye wear (e.g. goggles or face shield).

Body protection:

Wear coveralls over long-sleeved shirt and long pants, socks and chemical-resistant footwear. Wear chemical-resistant apron, if transferring or loading the fumigant or cleaning up spills or equipment.

9 PHYSICAL and CHEMICAL PROPERTIES

| | |
|---|---|
| Appearance | Liquid; Pale green to colorless to yellow amber |
| Odor | Strong sulfur and/or amine |
| Odor Threshold | Not determined |
| pH @ 20° C (68° F) | 8.5 - 11 |
| Melting/Freezing Point | Not determined |
| Boiling Point | 108 °C (226 °F) |
| Flash Point | > 93 °C (> 199 °F) |
| Evaporation Rate | N/A |
| Flammability (Solid/Gas) | N/A |
| Upper/Lower Flammability or Explosive Limits | N/A |
| Vapor Pressure | 21 mm Hg @ 77° F (25° C) |
| Vapor Density | NA |
| Relative Density | NA |
| Specific Gravity | 1.273 (10.6 lbs/gal @25°C, typical) |
| Solubility (in Water) | Fully miscible |
| Partition Coefficient: n-octanol/water | NA |
| Auto-ignition temperature | Product is not self-igniting. |
| Decomposition temperature | NA |
| Viscosity | NA |

10 STABILITY and REACTIVITY

| | |
|---|---|
| Reactivity | Product is reactive to elevated temperatures or dilution with water. |
| Chemical stability | This is a stable material under ambient temperature and storage conditions. |
| Possibility of hazardous reactions | Ignition, heat, open flame and long exposure to high temperatures. Acids or acidic materials. |
| Incompatible materials | Prolonged exposure to air will result in decomposition to form methyl isothiocyanate (MITC) a very toxic and flammable material. Metam sodium solutions are corrosive to copper, zinc and aluminum or any of their alloys such as brass, bronze or galvanized materials. These materials of construction should not be used in handling systems or storage containers for this product. |
| Hazardous decomposition products | Heating this product will evolve methyl isothiocyanate (MITC) and hydrogen sulfide (H ₂ S) and potentially carbon disulfide (CS ₂) and methylamine (MMA). Heating to dryness will cause the production of oxides of nitrogen. |

11 TOXICOLOGICAL INFORMATION

Acute toxicity:

LD/LC₅₀ values relevant for classification:

| | | |
|-------------------|------------------------|--------------------|
| Oral | Rat LD ₅₀ | 892 mg/kg |
| Dermal | Rat LD ₅₀ : | > 2000 mg/kg |
| Inhalation | Rat LC ₅₀ : | 2.02 mg/L (4 hour) |

Primary irritant effect:

on the skin

Strong caustic effect on skin and mucous membranes.

on the eye

Corrosive effect.

Dermal sensitization:

May be a skin sensitizer (guinea pig)

Chronic/Carcinogenicity:

Lab studies have shown some carcinogenic effects in lab animals.

Teratology:

Lab studies have shown some developmental effects in lab animals.

Reproduction:

Lab studies have shown no evidence of reproductive toxicity in lab animals.

Mutagenicity:

Lab studies have shown some evidence of mutagenicity *in vitro* but no conclusive evidence *in vivo*.

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 ECOLOGICAL INFORMATION

Aquatic Toxicity:

Metam potassium is toxic to aquatic species and is a listed Marine pollutant. Do not apply to waterways, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate waterways when disposing of equipment wash waters.

13 DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. 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 DISPOSAL: NON-REFILLABLE CONTAINERS. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds.

Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

REFILLABLE CONTAINER. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

FOR BULK AND MINI-BULK CONTAINERS

CONTAINER DISPOSAL: Reseal container and offer for recycling or reconditioning; triple rinse (or equivalent); or clean in accordance with manufacturer's instructions.

CONTAINER PRECAUTIONS: Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions and damage or worn threads on closure devices.

REFILL ONLY WITH Sectagon-K54 SOIL FUMIGANT

The contents of this container cannot be completely removed by cleaning. Refilling with materials other than Sectagon-K54 soil fumigant will result in contamination and may weaken the container. After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container.

14 TRANSPORT INFORMATION

UN Number:

DOT, ADR, IMDG, IATA

UN3266

UN Proper shipping name:

DOT

Corrosive liquid, basic, inorganic, n.o.s. (metam-potassium)

ADR

UN3266 Corrosive liquid, basic, inorganic, n.o.s. (metam- potassium), ENVIRONMENTALLY HAZARDOUS

IMDG

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (metam- potassium), MARINE POLLUTANT

IATA

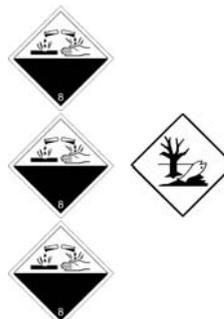
CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.

Transport hazard class(es)/Label(s):

DOT

ADR, IMDG

IATA



14 TRANSPORT INFORMATION (continued)

| | |
|---|--|
| Packing group: | II |
| Environmental hazards: | Product contains environmentally hazardous substances: metam-potassium. |
| Marine pollutant: | Yes Symbol (fish and tree) |
| Special marking (ADR): | Symbol (fish and tree) |
| Special precautions for user: | Warning: Corrosive substances |
| EMS Number: | F-A,S-B |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: | Not applicable |
| Transport/Additional information: | |
| DOT | |
| Quantity limitations | On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L |
| Remarks: | Special marking with the symbol (fish and tree). |
| ADR | |
| Excepted quantities (EQ) | Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml |
| IMDG | |
| Excepted quantities (EQ) | Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| UN "Model Regulation": | UN3266, Corrosive liquid, basic, inorganic, n.o.s., 8, II |

15 REGULATORY INFORMATION

FIFRA: Yes

Product Name: Sectagon – K54

EPA Reg. No. 61842-7

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. 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:

DANGER

Fatal if absorbed through skin.

Corrosive. Causes skin burns and irreversible eye damage.

Do not get in eyes, on skin, or on clothing.

May be fatal if swallowed or inhaled.

Do not breathe vapor or spray mist.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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

Section 355 (extremely hazardous substances): None of the ingredients is listed.

Section 313 (Toxic Release Reporting-Form R):

| <u>Chemical name</u> | <u>CAS No.</u> | <u>Concentration</u> |
|-----------------------------------|----------------|----------------------|
| Potassium N-methyldithiocarbamate | 137-41-7 | 54% |

TSCA (Toxic Substances Control Act): Exempt from TSCA

15 REGULATORY INFORMATION (continued)**California Proposition 65**

 **WARNING** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Potassium Methylthiocarbamate (CAS 137-41-7) Listed: December 31, 2010

CERCLA/SUPERFUND:

RQ (Reportable Quantity) Not Applicable

RCRA Classification

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

GHS label elements

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

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

16 OTHER INFORMATION

Issue Date: July 25, 2018

REVISIONS: Updated Prop 65 Warning language.

The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information herein.

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