

Safety Data Sheet

1 IDENTIFICATION




Product Name: Velpar® Alfamax™ Gold Herbicide
EPA Reg. No.: 61842-46
Chemical Family: Urea, Triazine

Manufacturer/Supplier: Tessengerlo 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 (Tessengerlo Kerley)

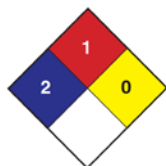
2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

| Pictogram | Hazard Statements | Precautionary Statements |
|---|---|---|
|  | Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. (Blood, Bladder) | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective clothing and face protection. If exposed or concerned: Get medical attention. Store locked up and dispose of contents in accordance with local regulations. |
|  | Causes serious eye damage. | Wear goggles or face shield. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center or a doctor if you feel unwell. |
|  | Harmful if inhaled | Avoid breathing spray. Use only outdoors or in a well-ventilated area. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. |

Signal word
 Danger

NFPA Hazard Ratings



HMIS Ratings

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

3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization: Mixture

Description: Mixture of the substance(s) listed below with nonhazardous additions.

| Active Ingredient: | Component | CAS No. | % by Weight |
|--------------------|----------------------------------|------------|-------------|
| | Diuron | 330-54-1 | 55.4 |
| | Hexazinone | 51235-04-2 | 23.1 |
| | Modified Aromatic Sulfonate Salt | | 1 - 5 |
| | Sodium Benzoate | 532-32-1 | 1 - 5 |

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 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 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 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:

Water spray, foam, dry chemical, carbon dioxide (CO₂)

Special hazards arising from the substance or mixture

No relevant information available.

Advice for firefighters

If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers/tanks with water spray.

Protective equipment:

Full protective clothing and self-contained breathing apparatus should be worn.

6 ACCIDENTAL RELEASE MEASURES

Review sections 5 and 7 of this Safety Data Sheet before proceeding with cleanup. Use appropriate PPE during cleanup.

Personal precautions, protective equipment and emergency procedures

Evacuate personnel, thoroughly ventilate area, and use self-contained breathing apparatus. Use personal protective equipment.

Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

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.

Avoid prolonged or repeated exposure.

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:

Keep protective respiratory device available.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place.

Store in a well ventilated place.

Keep away from any sources of heat or flame.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Engineering controls Use only with adequate ventilation.

Components with occupational exposure limits:

Exposure Guidelines

Exposure Limit Values

Permissible exposure limit:

Diuron

| | |
|------------|----------------------|
| ACGIH TLV: | 10 mg/m ³ |
|------------|----------------------|

Additional information:

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

Personal protective equipment:

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.

Breathing equipment:

Use NIOSH approved, dual cartridge respirators for dusts or mists if local ventilation is inadequate (N, R or P class filter media with NIOSH approved prefix TC-84A).

Protection of hands:



Protective gloves

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

Material of gloves

Butyl rubber, BR

Natural rubber, NR

Nitrile rubber, NBR

Neoprene gloves

Penetration time of glove material

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

8 EXPOSURE CONTROLS/PERSONAL PROTECTION *(cont.)*

Eye protection:

Tightly sealed goggles

Face protection

Body protection:

Wear long-sleeved shirt and long pants, waterproof shoes and socks. Wash contaminated clothing before reuse.

9 PHYSICAL and CHEMICAL PROPERTIES

| | |
|---|----------------|
| Appearance | Beige granules |
| Odor | Slight |
| Odor Threshold | N/A |
| pH | 7.4 |
| Melting/Freezing Point | Not determined |
| Boiling Point | NA |
| Flash Point | N/A |
| Evaporation Rate | N/A |
| Flammability (Solid/Gas) | N/A |
| Upper/Lower Flammability or Explosive Limits | N/A |
| Vapor Pressure | NA |
| Vapor Density | NA |
| Relative Density | NA |
| Bulk Density | 0.672 g/L |
| Solubility (in Water) | Not determined |
| Partition Coefficient: n-octanol/water | NA |
| Auto-ignition temperature | NA |
| Decomposition temperature | NA |
| Viscosity | NA |

10 STABILITY and REACTIVITY

| | |
|------------------------------------|--|
| Reactivity | N/A |
| Chemical stability | This is a stable material under normal temperature and storage conditions. |
| Possibility of hazardous reactions | Polymerization will not occur |
| Conditions to avoid | Ignition, heat, open flame and long exposure to high temperatures |
| Incompatible materials | Strong acids and strong bases (Hexazinone) |
| Hazardous decomposition products | None known |

11 TOXICOLOGICAL INFORMATION

Acute toxicity:

LD/LC₅₀ values relevant for classification:

| | | |
|------------------------|---------------------------|--------------|
| Oral (estimated) | Rat LD ₅₀ | 2,677 mg/Kg |
| Dermal (estimated) | Rabbit LD ₅₀ : | >5,000 mg/Kg |
| Inhalation (estimated) | Rat LC ₅₀ : | 2.5 mg/Kg |

Primary irritant effect:

on the skin

No skin irritation (Rabbit)

on the eye

Corrosive (Rabbit)

11 TOXICOLOGICAL INFORMATION (cont.)

Sensitization

Animal testing did not cause sensitization by skin contact (Guinea pig)

Chronic Toxicity:

The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Repeated dose toxicity: Diuron

Oral (rat): Red blood cell destruction causing abnormal decrease in number of red blood cells (anemia), spleen effects, bone marrow changes, kidney effects, bladder effects, reduced body weight gain

Oral (dog): Red blood cell destruction causing abnormal decrease in number of red blood cells (anemia), spleen effects, bone marrow changes, reduced body weight gain

Inhalation (rat): Red blood cell destruction causing abnormal decrease in number of red blood cells (anemia), spleen effects

Carcinogenicity: At levels of exposure that significantly exceed those expected under labeled usage conditions, an increased incidence of tumors was observed in laboratory animals.

Mutagenicity: Overall weight of evidence indicates that the substance is not mutagenic.

Reproductive toxicity: Animal testing did not show any effects on fertility.

Teratogenicity: Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Repeated dose toxicity: Hexazinone

Oral (Dog): Increased liver enzyme levels in serum, reduced body weight gain, organ weight changes (Liver)

Carcinogenicity: Overall weight of evidence indicates that the substance is not carcinogenic.

Mutagenicity: Did not cause genetic damage in cultured bacterial cells; did not cause genetic damage in cultured mammalian cells; did not cause genetic damage in animals.

Reproductive toxicity: Animal testing showed no reproductive toxicity.

Teratogenicity: Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Repeated dose toxicity: Sodium Benzoate

Oral (rat): NOAEL: 1,000 mg/Kg. No toxicologically significant effects were found

Carcinogenicity: Not classifiable as a human carcinogen. Animal testing did not show any carcinogenic effects.

Mutagenicity: Animal testing did not show any mutagenic effects. Tests on mammalian cell cultures showed mutagenic effects. Evidence suggests this substance does not cause genetic damage in cultured bacterial cells. Evidence suggests this substance does not cause genetic damage in animals.

Reproductive toxicity: Animal testing showed no reproductive toxicity.

Teratogenicity: Evidence suggests the substance is not a developmental toxin in animals.

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

This information is based on the active ingredient(s):

AQUATIC TOXICITY

Diuron

| | | |
|--------------------------|---|------------|
| 96 hour LC ₅₀ | <i>Oncorhynchus mykiss</i> (rainbow trout): | 17.4 mg/L |
| 48 hour EC ₅₀ | <i>Daphnia magna</i> (water flea): | 1.4 mg/L |
| 72 hour EC ₅₀ | Freshwater algae: | 0.018 mg/L |
| 72 hour NOEC | Algae | 0.01 mg/L |

Hexazinone

| | | |
|--------------------------|------------------------|-----------|
| 96 hour LC ₅₀ | Bluegill sunfish: | >116 mg/L |
| 96 hour LC ₅₀ | Rainbow trout: | >320 mg/L |
| 48 hour EC ₅₀ | <i>Daphnia magna</i> : | 152 mg/L |

Sodium benzoate

| | | |
|--------------------------|--|-----------------------------|
| 96 hour LC ₅₀ | <i>Pimephales promelas</i> (fathead minnow) | 484 mg/L |
| | US EPA Test Guideline OPP 72-1 Information given is based on data obtained from similar substances | |
| 48 hour EC ₅₀ | <i>Daphnia magna</i> (water flea): | 1.4 mg/L |
| | (No information available) | |
| 6 d | NOEC <i>Danio rerio</i> (zebra fish) | 10 mg/l (no data available) |

According to the results of tests of biodegradability this product is not readily biodegradable.

13 DISPOSAL CONSIDERATIONS

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

CONTAINER DISPOSAL: 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:

IMDG, IATA

3077

UN Proper shipping name:

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Diuron, Hexazinone)

IATA

Environmentally hazardous substance, solid, n.o.s. (Diuron, Hexazinone)

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

IATA



IMDG



Packing group:

IMDG, IATA

III

Environmental hazards:

Yes, Diuron

Marine pollutant:

Yes, Diuron, Hexazinone

Transport/Additional information:

Not regulated by DOT in single packages containing less than 100 pounds.

15 REGULATORY INFORMATION**FIFRA: Yes****Product Name:** Velpar Alfamax Gold Herbicide **EPA Reg. No.** 61842-46

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! CAUSES EYE DAMAGE.

Corrosive, causes irreversible eye damage.

Harmful if swallowed.

Do not get in eyes or on clothing.

Avoid contact with skin.

Wash thoroughly with soap and water after handling.

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> |
|----------------------|----------------|----------------------|
| Diuron | 330-54-1 | 55.4% |
| Hexazinone | 51235-04-2 | 23.1% |

PA Right to Know Regulated Chemical(s)

Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Diuron

TSCA (Toxic Substances Control Act): Exempt from TSCA**Proposition 65**

This product contains a chemical known to the state of California to cause cancer. (diuron)

CERCLA/SUPERFUND:

RQ (Reportable Quantity) 181 lbs. based on the percentage composition of this chemical in the product: (diuron)

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, 2016

REVISIONS: New product SDS was formatted in compliance with HCS 29 CFR 1910.1200 Rev. 2012 and GHS Rev 05, and ANSI Z400.1.

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.

Velpar® and NovaSource® are registered trademarks of Tessenderlo Kerley, Inc.
Alfamax™ is a trademark of Tessenderlo Kerley, Inc. All rights reserved.