

* **1 Identification**

· **Product identifier**

· **Trade name: Tupersan® Herbicide**

EPA Registration No.: 10163-213

· **CAS Number: Active Ingredient: Siduron (50.0%), CAS:1982-49-6**

· **Application of the substance / the mixture** Agricultural herbicide

· **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**



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

Aquatic Acute 2 H401 Toxic to aquatic life.

· **Label elements**

· **GHS label elements**

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

· **Hazard pictograms**



GHS09

· **Signal word** Void

· **Hazard statements**

Toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

Avoid release to the environment.

Collect spillage.

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

· **Hazard description:**

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, and clothing.

Avoid breathing dust.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA

Printing date 04/15/2016

Reviewed on 04/15/2016

Trade name: Tupersan® Herbicide
EPA Registration No.: 10163-213

(Contd. of page 1)

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



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:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

Siduron		50.0%
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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 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.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA

Printing date 04/15/2016

Reviewed on 04/15/2016

Trade name: Tupersan® Herbicide
EPA Registration No.: 10163-213

(Contd. of page 2)

- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed** No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
All mixers, loaders, applicators and other handlers must wear:
 - Long-sleeved shirt and long pants
 - Chemical-resistant gloves
 - Shoes plus socks
- **Environmental precautions:**
This product is toxic to fish and aquatic invertebrates. 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 apply where runoff is likely to occur. Do not contaminate water when disposing of equipment washwaters or rinsate.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
- **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**
Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, and clothing. Avoid breathing dust.
 - **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.
 - **Information about storage in one common storage facility:**
Store product in original container only, away from other pesticides, fertilizer, food or feed.
 - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

US

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA

Printing date 04/15/2016

Reviewed on 04/15/2016

Trade name: Tupersan® Herbicide
EPA Registration No.: 10163-213

(Contd. of page 3)

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:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
 - Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
 - Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
 - Users should 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:**
 All mixers must wear: NIOASH-approved dust/mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P, or HE filter.
 - **Protection of hands:**



Protective gloves

- **Material of gloves:** Chemical-resistant gloves
- **Eye protection:** Not required.
- **Body protection:**
 All mixers, loaders, applicators and other handlers must wear:
 - Long-sleeved shirt and long pants
 - Chemical-resistant gloves
 - Shoes plus socks

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**
 - **Form:** Powder
 - **Color:** Light grey
 - **Odor:** Odorless
 - **Odor threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**
 - **Melting point/Melting range:** Undetermined.
 - **Boiling point/Boiling range:** Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not determined.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA

Printing date 04/15/2016

Reviewed on 04/15/2016

Trade name: Tupersan® Herbicide
EPA Registration No.: 10163-213

(Contd. of page 4)

· **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):** 0.27 g/cm³ (2.253 lbs/gal)

· **Relative density:** Not determined.

· **Solubility in / Miscibility with**

· **Water:** Dispersible.

· **Other information:** No further relevant information available.

10 Stability and reactivity

· **Reactivity:** No further relevant information available.

· **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:** No further relevant information available.

· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

Oral	LD50	>7500 mg/kg (rat)
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· **Primary irritant effect:**

· **on the skin:** Slightly irritating

· **on the eye:** Slight irritation

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

· **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.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA

Printing date 04/15/2016

Reviewed on 04/15/2016

Trade name: Tupersan® Herbicide
EPA Registration No.: 10163-213

(Contd. of page 5)

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

12 Ecological information

· Toxicity

This product is toxic to fish and aquatic invertebrates. 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 apply where runoff is likely to occur. Do not contaminate water when disposing of equipment washwaters or rinsate.

· **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.

· Ecotoxicological effects:

· **Remark:** Toxic for fish

· Additional ecological information:

· **General notes:** Do not allow product to reach ground water, water course or sewage system.

· 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 must 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 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**

Not regulated

· **ADR, IMDG, IATA**

UN3077

· UN proper shipping name

· **ADR**

3077 Environmentally hazardous substances, solid, n.o.s. (Siduron)

· **IMDG**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Siduron), MARINE POLLUTANT

· **IATA**

Environmentally hazardous substance, solid, n.o.s. (Siduron)

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA

Printing date 04/15/2016

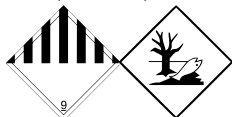
Reviewed on 04/15/2016

Trade name: Tupersan® Herbicide
EPA Registration No.: 10163-213

(Contd. of page 6)

· **Transport hazard class(es)**

· **ADR, IMDG, IATA**



· **Class** 9 Miscellaneous dangerous substances and articles
 · **Label** 9

· **Packing group**

· **ADR, IMDG, IATA** III

· **Environmental hazards:**

Product contains environmentally hazardous substances: Siduron

· **Marine pollutant:** Symbol (fish and tree)

· **Special marking (ADR):** Symbol (fish and tree)

· **Special marking (IATA):** Symbol (fish and tree)

· **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles

· **Danger code (Kemler):** 90

· **EMS Number:** F-A,S-F

· **Stowage Category** A

· **Stowage Code** SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable

· **Transport/Additional information:**

· **ADR**

· **Excepted quantities (EQ)** Code: E1
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 1000 g

· **IMDG**

· **Limited quantities (LQ)** 5 kg
 · **Excepted quantities (EQ)** Code: E1
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 1000 g

· **UN "Model Regulation":**

US DOT:
 Not regulated

ALL OTHERS:
 UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCES,
 SOLID, N.O.S. (SIDURON), 9, III

15 Regulatory information

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

(Contd. on page 8)

US

Safety Data Sheet

acc. to OSHA

Printing date 04/15/2016

Reviewed on 04/15/2016

Trade name: Tupersan® Herbicide
EPA Registration No.: 10163-213

(Contd. of page 7)

EPA /FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency (EPA) 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):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

None of the 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**

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

· **Hazard pictograms**

Not applicable

· **Signal word (US EPA) CAUTION**· **Hazard statements**

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, and clothing. Avoid breathing dust.

Toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

Avoid release to the environment.

Collect spillage.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA

Printing date 04/15/2016

Reviewed on 04/15/2016

Trade name: Tupersan® Herbicide
EPA Registration No.: 10163-213

(Contd. of page 8)

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** 04/15/2016 / 4

· **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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - AcuteHazard, Category 2

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

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

· **Sources** Tupersan® is a registered trademark of Gowan Company, L.L.C.

· *** Data compared to the previous version altered.**