

Reviewed on 09/16/2022

1 Identification

· Product identifier

· Trade name: Permit® Herbicide

· Article number: US35719

· CAS Number:

EPA Registration No.: 81880-2-10163

Active Ingredient: Halosulfuron-Methyl (75%), CAS:100784-20-1 Application of the substance / the mixture Agricultural herbicide

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Gowan Company, LLC.

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 (ProPharma Group®): (888) 478-0798

2 Hazard(s) identification

· Classification of the substance or mixture



GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed.

Eye Irritation 2B H320 Causes eye irritation.

- · Label elements
 - · GHS label elements

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

· Hazard pictograms



- · Signal word Warning
- · Hazard statements

H302 Harmful if swallowed. H320 Causes eye irritation.

· Precautionary statements

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

(Contd. on page 2)

Printing date 09/16/2022 Reviewed on 09/16/2022

Trade name: Permit® Herbicide

(Contd. of page 1)

P501

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

- · Hazard description: Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes or clothing.
- · Classification system:
 - · NFPA ratings (scale 0 4)



Health = 1 Fire = 0Reactivity = 0

HAZARD INDEX:

- 4 Severe Hazard
- 3 Serious Hazard
- 2 Moderate
- 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:

CAS: 100784-20-1 Halosulfuron-methyl

75.0%

♦ Toxic to Reproduction 1B, H360; ♦ Aquatic Acute 1, H400; Aquatic Chronic 1, H410

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.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · 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 No further relevant information available.

(Contd. on page 3)

Printing date 09/16/2022 Reviewed on 09/16/2022

Trade name: Permit® Herbicide

(Contd. of page 2)

· 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

Firefighters and others that may be exposed to vapors, mists, dusts, or products of combustion should wear full protective clothing and self-contained breathing apparatus. Equipment should be thoroughly cleaned after use.

• **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions:

This product is toxic to non-target vascular plants. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.

· Methods and material for containment and cleaning up:

Absorb remaining material or small spills with an inert material and then place in a chemical waste container. Flush residual spill area with water. Refer to Section 13 for disposal information and Section 15 for reportable quantity information.

· 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.

· Protective Action Criteria for Chemicals

· *PAC-1*:

None of the ingredients are listed.

· *PAC-2*:

None of the ingredients are listed.

· *PAC-3*:

None of the ingredients are listed.

7 Handling and storage

- · Handling:
 - · Precautions for safe handling

Avoid contact with eyes or clothing. 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. Do not apply directly to water, 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 washwaters.

· Information about protection against explosions and fires: No special measures required.

(Contd. on page 4)

Printing date 09/16/2022 Reviewed on 09/16/2022

Trade name: Permit® Herbicide

(Contd. of page 3)

- · Conditions for safe storage, including any incompatibilities
 - · Storage:
 - Requirements to be met by storerooms and receptacles:

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Store under cool, dry conditions (below 120°F). Do not store under moist conditions.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

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.

Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes or clothing.

- · 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.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- Breathing equipment: Not required.
- Protection of hands:



Protective gloves

- · Material of gloves Chemical-resistant 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: Goggles recommended during refilling.
- Body protection:

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- · Shoes plus socks

9 Physical and chemical properties

- · Information on basic physical and chemical properties
 - · General Information
 - · Appearance:
 - · Form: Granulate

(Contd. on page 5)

Printing date 09/16/2022 Reviewed on 09/16/2022

Trade name: Permit® Herbicide

		(Contd. of pag
· Color:	Beige	
· Odor:	Slightly Vanilla	
· Odor threshold:	Not determined.	
· pH-value at 20 °C (68 °F):	6.6	
· Change in condition		
· Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not determined.	
· 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):	0.656 g/cm³ (5.47432 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Dispersible.	
· Partition coefficient (n-octanol/we	ater): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
· Kinematic:	Not applicable.	
Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- Chemical stability

This product should be stable for at least two years under normal conditions of warehouse storage. Store in a cool, well-ventilated place away from foodstuffs, reducing agents and acids.

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid Store under cool, dry conditions (below 120°F). Do not store under moist conditions.
- · Incompatible materials: Reducing agents and acids
- · Hazardous decomposition products: No dangerous decomposition products known.

US

Printing date 09/16/2022 Reviewed on 09/16/2022

Trade name: Permit® Herbicide

(Contd. of page 5)

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:

LD/LC50 values that are relevant for classification:		
Oral	LD50	1,287 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4 h	>5.7 mg/l (rat)

- Primary irritant effect:
 - on the skin: Slightly irritating
 - · on the eye: Moderately Irritating
- · Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

. Harmful Irritant

- · 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 product is toxic to non-target vascular plants. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Halosulfuron-methyl is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

- · 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.
 - · Other information:

Ecotoxicity data shown is for the active ingredient, halosulfuron-methyl.

48-hr EC50 Daphnia magna: >107 mg/L; practically nontoxic.

96-hr LC50 Bluegill sunfish: >118 mg/L; practically nontoxic.

96-hr LC50 Rainbow trout: >131 mg/L; practically nontoxic.

5-day EC50 Algae (Selenastrum capricornutum): 0.0041/L; very highly toxic.

- · Ecotoxical effects:
 - · Other information:

This product is toxic to non-target vascular plants. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

(Contd. on page 7)

Printing date 09/16/2022 Reviewed on 09/16/2022

Trade name: Permit® Herbicide

(Contd. of page 6)

Halosulfuron-methyl is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

· Additional ecological information:

· General notes:

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

· 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 that cannot be used or chemically reprocessed should be disposed of in a landfill for pesticide disposal or in accordance with applicable Federal, state or local procedures.

· Uncleaned packagings:

· Recommendation:

Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. 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.

UN-Number	
· DOT	Void
· ADR, IMDG, IATA	UN3077
UN proper shipping name	
$\cdot DOT$	Void
· ADR	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE
	SOLID, N.O.S. (Halosulfuron-methyl)
· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLII
	N.O.S. (Halosulfuron-methyl), MARINE POLLUTANT
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLII
	N.O.S. (Halosulfuron-methyl)
Transport hazard class(es)	
· DOT	Not Regulated
· Class	Void

(Contd. on page 8)

Printing date 09/16/2022 Reviewed on 09/16/2022

Trade name: Permit® Herbicide

(Contd. of page 7)

· ADR, IMDG, IATA



· Class 9 Miscellaneous dangerous substances and articles

· Label

· Packing group

· **DOT** Void · **ADR, IMDG, IATA** III

• Environmental hazards: Product contains environmentally hazardous substances:

Halosulfuron-methyl

· Marine pollutant: Yes

Symbol (fish and tree)
Special marking (ADR):
Special marking (IATA):
Symbol (fish and tree)
Symbol (fish and tree)

• Special precautions for user Warning: Miscellaneous dangerous substances and articles

· Hazard identification number (Kemler code): 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:

· ADK

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": UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. (HALOSULFURON-METHYL), 9, 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 (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.

(Contd. on page 9)

Printing date 09/16/2022 Reviewed on 09/16/2022

Trade name: Permit® Herbicide

(Contd. of page 8)

· Marketing authorization number:

· 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.

· Hazardous Air Pollutants

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)

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

Avoid contact with eyes or clothing. H302 Harmful if swallowed. H320 Causes eye irritation.

· Precautionary statements

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

(Contd. on page 10)

Printing date 09/16/2022 Reviewed on 09/16/2022

Trade name: Permit® Herbicide

(Contd. of page 9)

P330 Rinse mouth.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P501 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: Systems Design and Control
- · Contact: sds@gowanco.com
 - · Date of preparation / last revision 09/16/2022
 - · Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

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)

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

Acute Toxicity - Oral 4: Acute toxicity - Category 4

Eye Irritation 2B: Serious eye damage/eye irritation - Category 2B

Toxic to Reproduction 1B: Reproductive toxicity - Category 1B

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

·Sources

Halosulfuron-methyl is manufactured by Nissan Chemical Industries, Ltd.

Permit® is a registered trademark of Nissan Chemical Industries Ltd.