

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** Halo-Force 750WG Herbicide Halosulfuron-methyl water dispersible  
**Other means of identification:** granule; sulfonylurea herbicide

**Recommended use of the chemical and restrictions on use:** For the control of various weeds of turf and agricultural situations as specified on the product label

**Supplier:** Indigo Specialty Products Pty Ltd

**Street Address:** 6/163-173 McEvoy Street, Alexandria NSW 2015, Australia  
**Telephone No:** + 61-402 735 887

**Email:** peterk@indigospecialty.com  
**Distributed by:** Lawn Pride Australia  
PO Box 1364, Beenleigh QLD 4207

**Emergency Telephone:** + 61- (0) 402 735 887

## 2. HAZARDS IDENTIFICATION

**Classification of the substance mixture:** This material is Hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

**Classification of the substance or mixture:**  
Eye Damage/Irritation - Category 1

The following health hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity - Category 1  
Chronic Aquatic Toxicity - Category 1

**SIGNAL WORD:** DANGER



**Hazard Statement(s):**  
H318 Causes serious eye damage

**Precautionary Statement(s):**

**Prevention:**

P280 Wear protective gloves and eye protection/face protection.

**Response:**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

**Storage:** No storage statements.

**Disposal:** No disposal statements.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion (w/w)
Mixture of alkylnaphthalene sulfonate, sodium salt and sodium dioctyl sulposuccinate	Proprietary ingredient	< 10%
Other components are not considered hazardous in this formulation and therefore are not required to be disclosed according to the WHS Regulations. Following is the information for the active constituent which is not classified as hazardous in this formulation.		
Halosulfuron-methyl	100784-20-1	75%

### 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

<b>Inhalation:</b>	Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.
<b>Skin Contact:</b>	If skin or hair contact occurs, remove contaminated clothing and wash skin and hair with soap and water. If irritation occurs seek medical advice.
<b>Eye Contact:</b>	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.
<b>Ingestion:</b>	Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice.
<b>First Aid Facilities:</b>	Eyewash and normal washroom facilities.
<b>Indication of immediate medical attention and special treatment needed:</b>	Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	Normal foam, dry agent (carbon dioxide, dry chemical powder).
<b>Specific hazards arising from the substance or mixture:</b>	Non- combustible material.
<b>Special protective equipment and precautions for fire-fighters:</b>	Fire fighters should wear self-contained breathing apparatus and suitable protective clothing to prevent risk of exposure to products of decomposition.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Emergency procedures/ Environmental precautions:</b>	Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.
<b>Personal precautions/ Protective equipment:</b>	Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation.
<b>Methods and materials for containment and cleaning up:</b>	Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

### 7. HANDLING AND STORAGE

<b>Precautions for safe handling:</b>	Keep containers closed at all times - check regularly for leaks or spills. Transport and store upright. Avoid skin and eye contact. Keep out of reach of children. Do not eat, drink or smoke in contaminated areas. Always remove contaminated clothing and wash hands before eating, drinking, smoking or
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using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

**Conditions for safe storage, including any incompatibilities:** Store in the original container, in a cool dry well-ventilated area out of direct sunlight. Keep containers closed when not in use - check regularly for leaks.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters:** No value assigned for this specific material by Safe Work Australia.

**Appropriate engineering controls:** Use in well ventilated areas. Keep containers closed when not in use.

**Individual protection measures, such as Personal Protective Equipment (PPE):**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Observe good standards of hygiene and cleanliness. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

**Respiratory Protection:** A respirator is not needed under normal and intended conditions of product use however if ventilation is not adequate then a respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

**Eye and Face protection:** Safety glasses/goggles with side shield protection should be worn as a general precaution. Consult AS/NZS 1336 and AS/NZS 1337 for further information.

**Skin Protection:** PVC or nitrile rubber gloves should be worn as a general precaution. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161 for further information.

Trousers, long sleeved shirt or overalls and closed in shoes or safety footwear should be worn as a general precaution. Consult AS/NZS 2210 and AS/NZS 2919 for further information.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Granules

**Colour:** Beige

**Odour:** Scorched vanilla

**pH:** 7.5-8.5 (1% w/v dilution)

**Specific Gravity:** No information available.

**Melting Point/Freezing Point:** No information available.

**Boiling Point/range:** No information available.

**Flash Point:** No information available.

**Evaporation Point:** No information available.

**Vapour Pressure:** 3.50x10<sup>2</sup> mPa @ 25°C (Halosulfuron-methyl)

**Vapour Density:** No information available.

**Solubility:** 10.2 mg/L (Halosulfuron-methyl)  
Halo-Force 750WG Herbicide is a dispersion in water.

**Partition coefficient: n- octanol/water** 9.55x10<sup>-1</sup> (Halosulfuron-methyl)

**Auto-ignition Temperature:** No data available. Halosulfuron-methyl is not highly flammable

**Decomposition Temperature:** No information available.

**Viscosity:** No information available.

## 10. STABILITY AND REACTIVITY

**Reactivity:** Non-reactive under normal conditions.

**Chemical stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Possibility of hazardous reactions:** Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid:** None known.  
**Incompatible materials:** None known.  
**Hazardous decomposition products:** Oxides of carbon and nitrogen.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** 5561 mg/kg (rat, calculated from ingredients) Category 5  
 >2000 mg/kg (rabbit, calculated from ingredients) Category 5  
 No data for the product. Halosulfuron-methyl is low in toxicity by inhalation as a spray mist. The 4-hour LC50 is >6.0 mg/L in rats

**Ingestion:** Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury.

**Inhalation:** Halosulfuron-methyl has sufficiently low vapour pressure so that Halosulfuron-methyl does not readily volatilize. Use as per label instructions (low pressure spray) is unlikely to result in significant inhalation exposure. Breathing in very high concentrations of spray mist through use of this product may cause respiratory irritation.

**Skin:** The product is not considered a skin irritant.

**Eye:** Product will irritate the eyes.

**Respiratory or skin sensitisation:** Not a skin sensitiser and not expected to be a respiratory sensitiser.

**Germ cell mutagenicity:** Not considered to be a mutagenic hazard.

**Carcinogenicity:** Not considered to be a carcinogenic.

**Reproductive toxicity:** Not considered to be toxic to reproduction.

**STOT-single exposure:** Not expected to cause toxicity to a specific target organ.

**STOT-repeated exposure:** Not expected to cause toxicity to a specific target organ.

**Aspiration hazard:** Not expected to be an aspiration hazard.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Avoid contaminating waterways. Avoid contaminating waterways. Do not discharge product into the environment without control.

**Information on Halosulfuron-methyl active constituent**

**Fish:** Highly toxic to fish  
 LC50 (96 h) >131 mg/L, *Oncorhynchus mykiss*  
 NOEC (21 d) 34 mg/l, *Colinus virginianus*

**Aquatic invertebrates:** EC50 (48 h) >1.07 mg/l, *Daphnia magna*  
 NOEC (21 d) >6.9 mg/l, *Daphnia magna*  
 EC50 (96 h) 72.0 mg/L *Mysid shrimp (Americamysis bahia)*  
 NOEC (28 d) 5.0 mg/kg sediment *Chironomus riparius*

**Aquatic plants:** EC50 (7 day) 0.0002 mg/l (biomass), *Lemna gibba*  
 EC50 (72 h) 0.0053 mg/l (growth), *Pseudokirchneriella subcapitata*

**Birds:** Acute oral LD50 >2250 mg/kg *Colinus virginianus* (bobwhite quail)  
 Short-term dietary LC50 >5620 mg/kg *Colinus virginianus* (bobwhite quail)

**Terrestrial insects:** *Aphidius rhopalosiphi* LR50 300 g/ha (moderate)  
*Typhlodromus pyri* LR50 300 g/ha (moderate)

**Persistence/degradability:** Half-life of Halosulfuron-methyl is 14-119 days in aerobic soils (non-persistent).  
 No evidence of volatility.  
 Halosulfuron-methyl is stable to hydrolysis at pH 7 and is not pH sensitive.

**Bioaccumulative potential:** Halosulfuron-methyl bioaccumulation potential is considered to be low.

**Mobility in Soil:** Slightly to moderately mobile  
 Koc = 109 (Linear)  
 Kd = 1.67 (Linear)  
 Kf = 1.51 (Freundlich)

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods:** On site disposal of the concentrated product is not acceptable. Refer to Waste Management Authority. Dispose of contents/container in accordance with local/regional/national/international regulations. Normally suitable for incineration by an approved agent.

## 14. TRANSPORT INFORMATION

**Road and Rail** According to AU01, Environmentally Hazardous Substances in packagings, IBC or any other receptacle not exceeding 500kg or 500 L are not subject to the ADG Code.

**Transport:** If transported above these limits, then it is classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; DANGEROUS GOODS

UN Number: 3077

Proper Shipping Name or Technical Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Halosulfuron-methyl)

Transport Hazard Class: 9

Packaging Group: III

Hazchem Code: 2Z

**Marine** Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

**Transport:**

UN Number: 3077

Proper Shipping Name or Technical Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Halosulfuron-methyl)

Transport Hazard Class: 9

Packaging Group: Not assigned.

IMDG EMS Fire: F - A

IMDG EMS Spill: S - F

**Air** Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA)

**Transport:** Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN Number: 30772

Proper Shipping Name or Technical Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Halosulfuron-methyl)

Transport Hazard Class: 9

Packaging Group: Not assigned.

## 15. REGULATORY INFORMATION

**Poison Schedule (SUSMP):** 5 - CAUTION

**APVMA Approval No:** 88911

**AICS:** All the constituents of this material are either listed on the Australian Inventory of Chemical Substances (AICS), not required due to the nature of the chemical, or have been assessed under the National Industrial Chemicals (Notification and Assessment) Act 1989 as amended.

## 16. OTHER INFORMATION

**General Information:** None

**Issue Number:** 002

**Issue Date:** 28<sup>th</sup> June 2019

In any event, the review and, if necessary, the re-issue of an SDS shall be no longer than 5 years after the last date of issue.

**Reason(s) for Issue:** Second Issue.  
Revised Primary SDS and updated to GHS requirements

**Literary Reference:**

**Key abbreviations or acronyms used:**

ADG Code - Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)

AICS - Australian Inventory of Chemical Substances

AgVet Code Act 1994 – Agricultural and Veterinary Chemicals Code Act 1994

APVMA – Agricultural Pesticides and Veterinary Medicines Australia

GHS - Globally Harmonised System of Classification and Labelling of Chemicals (3<sup>rd</sup> revised edition) 2009

IARC - International Agency for Research on Cancer

LD<sub>50</sub> or LC<sub>50</sub> – Estimated lethal dose / concentration to kill 50% of the population/sample.

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (December 2016)

STEL - Short term exposure limit means the average airborne concentration of a substance calculated over a 15 minute period. The STEL should not be exceeded at any time during a normal eight hour working day.

STOT – Specific Target Organ Toxicity

SUSMP - Standard for the Uniform Scheduling of Medicines & Poisons

SWA - Safe Work Australia, formerly ASCC and NOHSC

TGA – Therapeutic Goods Australia

WHS – Workplace Health and Safety

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**END OF SDS**