

SECTION 1: Identification

1.1. GHS Product identifier

Product form : Substance
Trade name : Revolution
IUPAC name : Oxirane, methyl-, polymer with oxirane, monomethyl ether
CAS-No. : 9063-06-3

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Wetting agent
Restrictions on use : No additional information available

1.4. Details of manufacturer or importer

Supplier

Aquatrols Europe Ltd
Blackbox
Beech Lane
Wilmslow
Cheshire
SK9 5ER, UK
T: +44 (0) 1233 633267
E-mail: SDS@aquatrols.com

Distributor

Turfcare Australia
115 Pitt Town Rd
McGraths Hill NSW 2756
Australia
T: 02 4571 6444

1.5. Emergency phone number

Emergency number : Chemtrec: (800) 424-9300 (United States and Canada), Chemtrec International: +1-703-527-388; Australian Poisons Information Centre: 13 11 26

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Not classified

2.2. GHS Label elements, including precautionary statements

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	Conc.	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
Oxirane, methyl-, polymer with oxirane, monomethyl ether (Main constituent)	9063-06-3	≤ 100	Not classified

Revolution

Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it before reuse. Get medical attention if symptoms occur.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.
First-aid measures after ingestion	: Do not induce vomiting. Rinse mouth out with water. Get medical advice/attention if you feel unwell.

4.2. Symptoms caused by exposure

Symptoms/effects after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Redness. Itching. Slight irritation.
Symptoms/effects after eye contact	: Redness. Lacrimation. Itching. Blurred vision. Slight irritation.
Symptoms/effects after ingestion	: Ingestion may cause nausea, vomiting and diarrhea.

4.3. Medical attention and special treatment

Other medical advice or treatment	: Treat symptomatically.
-----------------------------------	--------------------------

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Carbon dioxide. Water spray. Foam. Use extinguishing agent suitable for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: Presents no particular fire or explosion hazard. Burning produces stinking and toxic fumes. In case of fire and/or explosion do not breathe fumes.
General measures	: Avoid all contact with skin, eyes, or clothing.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Evacuate the danger area. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Fight fire from safe distance and protected location. Use extinguishing media appropriate for surrounding fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Wear a self contained breathing apparatus. Wear fire/flammable resistant/retardant clothing. Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid all contact with skin, eyes, or clothing.
------------------	---

6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Evacuate unnecessary personnel. Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing vapours. Do not touch or walk on the spilled product. No action shall be taken without appropriate training or involving any personal risk.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment.
----------------------	--

Revolution

Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

Emergency procedures : Evacuate unnecessary personnel. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and materials for containment and cleaning up

For containment : Stop leak without risks if possible. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Caution : this product can cause the floor to be slippery.

Methods for cleaning up : Move containers from spill area. Recover small spills with a suitable absorbent, like diatomaceous earth. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Ventilate spillage area. Clean contaminated surfaces with an excess of water. Prevent entry to sewers and public waters.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Ensure good ventilation of the work station. Provide local exhaust or general room ventilation. Do not breathe vapours. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Incompatible materials, Store in a dry place. Keep away from food, drink and animal feedingstuffs. Keep container tightly closed. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store in accordance with local, regional, national or international regulation.

Incompatible products : Strong oxidizing agents. Strong bases.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

No additional information available

8.2. Monitoring methods

Monitoring methods : Refer to all applicable national, international and local regulations or provisions.

8.3. Engineering controls

Appropriate engineering controls : Provide local exhaust or general room ventilation. Ensure exposure is below occupational exposure limits (where available). Handle in accordance with good industrial hygiene and safety procedures. Avoid all unnecessary exposure.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment : Wear recommended personal protective equipment.

Hand protection : Wear suitable gloves resistant to chemical penetration. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

Eye protection : Chemical goggles or safety glasses

Skin and body protection : Wear suitable protective clothing. Skin protection appropriate to the conditions of use should be provided

Respiratory protection : No respiratory protection needed under normal use conditions. Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material

Revolution

Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

Environmental exposure controls : Avoid release to the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

SECTION 9: Physical and chemical properties

Physical state	: Liquid
Appearance	: No data available
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point / Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Flammability	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Explosive properties	: No data available
Explosive limits	: No data available
Minimum ignition energy	: No data available
Fat solubility	: No data available

SECTION 10: Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport. No dangerous reactions known.
Chemical stability	: Stable under normal conditions of use.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use. Hazardous polymerisation: Will not occur.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Extremely high or low temperatures.
Incompatible materials	: Strong bases. Strong oxidizing agents.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Oxirane, methyl-, polymer with oxirane, monomethyl ether (9063-06-3)

LD50 oral rat	> 2300 – ≤ 10000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	200 mg/l (1 h)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

Revolution

Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Other information	: No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

SECTION 12: Ecological information

Environmental hazard classification is not part of the Australian Work Health and Safety (WHS) Regulations. However, environmental and ecological information is provided in accordance with the Code of Practice for the Preparation of Safety Data Sheets

12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Oxirane, methyl-, polymer with oxirane, monomethyl ether (9063-06-3)

LC50 - Fish [1]	2400 mg/l
EC50 - Crustacea [1]	2210 mg/l (Daphnia magna)
LD50 dermal rat	> 2000 mg/kg
LD50 oral rat	> 2300 – ≤ 10000 mg/kg

12.2. Persistence and degradability

Oxirane, methyl-, polymer with oxirane, monomethyl ether (9063-06-3)

Persistence and degradability	Biodegradability in water: no data available.
-------------------------------	---

12.3. Bioaccumulative potential

Oxirane, methyl-, polymer with oxirane, monomethyl ether (9063-06-3)

Bioaccumulative potential	No data available concerning bioaccumulation.
---------------------------	---

12.4. Mobility in soil

Oxirane, methyl-, polymer with oxirane, monomethyl ether (9063-06-3)

Ecology - soil	No additional information available.
----------------	--------------------------------------

12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available.

Oxirane, methyl-, polymer with oxirane, monomethyl ether (9063-06-3)

Fluorinated greenhouse gases	False
------------------------------	-------

SECTION 13: Disposal considerations

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Do not dispose of waste into sewer.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecological waste information	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADG / IMDG / IATA

Revolution

Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

ADG	IMDG	IATA
14.1. UN number		
Not regulated for transport		
14.2. UN Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated

14.6. Special precautions for user

Specific storage requirement : No data available
Shock sensitivity : No data available

14.7. Additional information

Other information : No supplementary information available

Transport by road and rail

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

14.8. Hazchem or Emergency Action Code

Hazchem Code : Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations

Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS) : Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory) status Inventory)

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Not applicable

Australian Pesticides and Veterinary Medicines Authority (APVMA)

Not applicable

15.2. International agreements

No additional information available

SECTION 16: Other information

Data sources : ECHA (European Chemicals Agency). Supplier's safety documents.

Safety Data Sheet (SDS), Australia

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.