Safety Data Sheet
Revolution

1. Identification

Product identifier used on the label

Revolution

Recommended use of the chemical and restriction on use

Recommended use*: Chemical

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
Aquatrols Corporation of America
1273 Imperial Way
Paulsboro, NJ 08066

Telephone: +1 800-257-7797

Emergency telephone number

CHEMTREC: 1-800-424-9300

Other means of identification

Synonyms: Polymer based on: block copolymer, modified

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

No need for classification according to GHS criteria for this product.

Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Emergency overview

CAUTION:
INGESTION MAY CAUSE GASTRIC DISTURBANCES.
Use with local exhaust ventilation.
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.
Wear NIOSH-certified chemical goggles.
Wear protective clothing.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

This product does not contain any components classified as hazardous under the referenced regulation.

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Content (W/W)	Chemical name
61419-46-3	80.0 - 100.0 %	Oxirane, methyl-, polymer with oxirane, dimethyl ether

4. First-Aid Measures

Description of first aid measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air.

If on skin:
Wash thoroughly with soap and water.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:
Rinse mouth and then drink plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms: No significant symptoms are expected due to the non-classification of the product.
Hazards: No data available.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
unburned hydrocarbons, carbon oxides

Advice for fire-fighters

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Further accidental release measures:
High risk of slipping due to leakage/spillage of product.

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, section 8.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder).
Dispose of absorbed material in accordance with regulations.
For large amounts: Pump off product.
Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

No special measures necessary provided product is used correctly.

Protection against fire and explosion:
No special precautions necessary.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and in a cool place.
The packed product is not damaged by low temperatures or by frost. Bulk must be protected from solidification.
Protect from temperatures above: 70 °C
Properties of the product change irreversibly on exceeding the limit temperature.

8. Exposure Controls/Personal Protection

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:
Chemical resistant protective gloves

Consult with glove manufacturer for testing data.

Eye protection:
Safety glasses with side-shields.

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:
Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form:	liquid	
Odour:	product specific	
Odour threshold:		not determined
Colour:	colourless	
pH value:	approx. 6	(50 g/l, 23 °C)
solidification temperature:	approx. -7 °C	(DIN ISO 2207)
Boiling point:	> 250 °C	
Flash point:	> 100 °C	(DIN 51758)
Flammability:	not self-igniting	
Lower explosion limit:		For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.
Upper explosion limit:		For liquids not relevant for classification and labelling.
Autoignition:	> 200 °C	(DIN 51794)
Vapour pressure:	< 0.1 hPa	(20 °C)
Density:	1.02 g/cm3	(23 °C)
Relative density:	1.0305	(20 °C) (OECD Guideline 109)
Vapour density:		not determined
Partitioning coefficient n-octanol/water (log Pow):		not determined
Self-ignition temperature:		not self-igniting
Thermal decomposition:	> 300 °C	
Viscosity, dynamic:	150 mPa.s	(23 °C)

Viscosity, kinematic:	approx. 140 mm2/s	(40 °C) (DIN 51562)
Particle size:		The substance / product is marketed or used in a non solid or granular form.
Solubility in water:		partly soluble
Miscibility with water:		partly miscible
Solubility (qualitative):	soluble solvent(s): polar solvents,	
Evaporation rate:		not determined
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:
Corrosive effects to metal are not anticipated.

Oxidizing properties:
Based on its structural properties the product is not classified as oxidizing.

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions when stored and handled according to instructions.
The product is chemically stable.

Conditions to avoid
See MSDS section 7 - Handling and storage.
Avoid humidity.

Incompatible materials
acids, Alkalines, caustics, halogens, reactive chemicals

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:
> 300 °C

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Oral
Type of value: LD50
Species: rat
Value: > 2,000 mg/kg

Inhalation
Type of value: LC50
Species: rat
not determined

Dermal
Type of value: LD50
Species: rat
not determined

Skin
Species: rabbit
Result: non-irritant

Eye
Species: rabbit
Result: non-irritant

Sensitization
Assessment of sensitization: No data available.

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

Genetic toxicity
Assessment of mutagenicity: No data available concerning mutagenic effects.

Carcinogenicity
Assessment of carcinogenicity: No data available concerning carcinogenic effects.

Reproductive toxicity
Assessment of reproduction toxicity: No data available.

Teratogenicity
Assessment of teratogenicity: No data available.

Other Information
The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

Symptoms of Exposure

No significant symptoms are expected due to the non-classification of the product.

12. Ecological Information

Toxicity

Toxicity to fish
LC50 (96 h), Fish
not determined

Aquatic invertebrates
LC50 (48 h), daphnia
not determined

Aquatic plants
EC50 (72 h) > 100 mg/l, algae

Chronic toxicity to fish
No data available.

Chronic toxicity to aquatic invertebrates
No data available.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Persistence and degradability

Elimination information

30 - 40 % CO_2 formation relative to the theoretical value (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) Moderately/partially biodegradable.

Mobility in soil

Assessment transport between environmental compartments
The substance will not evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is possible.

Additional information

Sum parameter

Chemical oxygen demand (COD): 2,010 mg/g

Add. remarks environm. fate & pathway:
Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:
Do not release untreated into natural waters. The product has not been tested. The statements on ecotoxicology have been derived from products of a similar structure and composition.

13. Disposal considerations

Waste disposal of substance:
Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

Container disposal:
Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:
Chemical TSCA, US released / listed
TSCA § 5 commenced PMN

EPCRA 311/312 (Hazard categories): Not hazardous;

NFPA Hazard codes:
Health : 1 Fire: 1 Reactivity: 0 Special:

HMIS III rating
Health: 1 Flammability: 1 Physical hazard: 0

16. Other Information

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Aquatrols Regulatory
SDS Prepared on: 05/08/2015

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