



Revolution - Liquid Formulation

Material Safety Data Sheet

Date Prepared: February 25, 2005

Supersedes Date: February 18, 2005

1. CHEMICAL PRODUCT AND COMPANY DESCRIPTION

AQUATROLS CORPORATION OF AMERICA
1273 IMPERIAL WAY
PAULSBORO, NJ 08066
USA

Emergency Phone Numbers:

For emergencies involving a spill, leak, fire, exposure or accident, contact CHEMTREC (800-424-9300 within the United States or 703-527-3887 for international collect calls).

For Product Information: 1-800-257-7797 or www.aquatrols.com

Chemical Name or Synonym: Modified alkylated polyol

C.A.S. Number: No known number exists.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Reg Number	Weight%	**Exposure Limits**	
			OSHA/PEL	ACGIH/TLV
Polymer based on: ethylene oxide, propylene oxide, block polymer, modified		>99%	Not established	Not established
Ethylene Oxide	75-21-8	< 0.0010		1.8 mg/m ³
Propylene Oxide	75-56-9	< 0.0010		48 mg/m ³

3. HAZARDS IDENTIFICATION

Physical Appearance and Odor: Clear to hazy viscous liquid, slight odor.

Warning Statements: No particular hazards known.

4. FIRST AID MEASURES

GENERAL ADVICE: Remove contaminated clothing.

EYE CONTACT: DO NOT RUB EYES. Wash affected eyes for at least 15 minutes under running water with eyelids held open.

SKIN CONTACT: Wash thoroughly with soap and water.

IF SWALLOWED: Rinse mouth and then drink plenty of water.

INHALATION: If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

Notes to Physician: Treat according to symptoms (decontamination, vital functions), no known specific antidote.



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5. FIRE FIGHTING MEASURES

Suitable extinguishing media:

water spray, dry extinguishing media, foam, carbon dioxide

Specific hazards:

Harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Further information:

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Use personal protective clothing.

Environmental precautions:

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For large amounts: pump off product.

For residues: pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations

Additional information: High risk of slipping due to leakage/spillage of product.

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperature: 15 to 49°C (59 to 120°F)

Handling: No special measures necessary provided product is used correctly.

Protection against fire and explosion: No special precautions necessary.

Storage: Further information on storage conditions: Keep container tightly closed and in a cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Gas filter EN141 Type A for gasses/vapours of organic compounds (boiling point > 65°C).

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials short-term contact and/or splashed (recommended: At least protective index 2, corresponding >30minutes of permeation time according to EN374):

Butyl rubber (butyl) – 0.7 mm coating thickness



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Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): nitrile rubber (NBR) – 0.4 mm coating thickness

Supplementary note: The specifications are based on own tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection: Safety glasses with side-shields (frame goggles (EN 166)

General safety and hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid	
Colour:	Colourless	
Odour:	product specific	
pH value:	approx 6 (50g/l, 23°C)	
Solidification temperature:	approx -7°C	(DIN/ISO2207)
Flash point:	> 100°C	(DIN 51758)
Ignition temperature	> 200°C	(DIN 51794)
Density:	1.02 g/cm ³ (23°C)	
Solubility in water:	fully soluble (15°C)	
Solubility (qualitative) solvent(s):	ethanol, propan-2-ol	soluble
Viscosity, kinematic:	approx 140 mm ² /s (40°C)	(DIN 51562)

10. STABILITY AND REACTIVITY

Conditions to avoid: Avoid humidity.

Hazardous reactions: No hazardous reactions when stored and handled according to instructions.

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

11. TOXICOLOGICAL INFORMATION

LD50/oral/rat: > 2,000 mg/kg

Primary skin irritation/rabbit: non-irritant

Primary irritations of the mucous membrane/rabbit: non-irritant

Addition information:

The product has not been tested. The statement has been derived from products of a similar structure and composition.



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12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Microorganisms/Effect on activated sludge:

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

Persistence and degradability

Elimination information

Test Methods:

OECD 301B; ISO 9439; 92/69/EEC, C.4-C

Methods of analysis:

CO2 formation relative to the theoretical value

Degree of elimination:

30 – 40%

Evaluation:

Moderately/partially biodegradable

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

Additional information

Other ecotoxicological advice: Do not release untreated into natural waters.

13. DISPOSAL CONSIDERATIONS

Must be dumped or incinerated in accordance with local regulations.

Contaminated packaging:

Uncontaminated packs can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. TRANSPORTATION INFORMATION

Not classified as hazardous under transport regulations (ADR RID ADNR IMDG/GGVSee ICAO/IATA)

US Department of Transportation Shipping Name: NOT REGULATED

15. REGULATORY INFORMATION

Inventory Status:

Inventory	Status
UNITED STATES (TSCA)	Y
CANADA (DSL)	Y
EUROPE (EINECS/ELINCS)	Not subject to labeling.
AUSTRALIA (AICS)	N
JAPAN (MITI)	N (ENCS listing #7-1321)
SOUTH KOREA (KECL)	N



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OTHER FEDERAL REGULATIONS:

FDA Status: N/A

FIFRA Status: N/A

STATE REGULATIONS: This product contains the following components that are regulated under California Proposition 65:

Ingredient	Cancer List	Reprod. List	No Sig. Risk Lvl. (ug/day)	RPI
Ethylene Oxide	Y	Y	2	ND

Regulations of the European union (Labelling)/National legislation/Regulations
Not subject to labelling

16. OTHER INFORMATION

National Fire Protection Association Hazard Ratings – NFPA (R):

- 1 Health Hazard Rating - Slight
- 1 Flammability Rating -- Slight
- 0 Reactivity Rating -- Minimal

National Paint and Coating Hazardous Materials Identification System - HMIS(R):

- 1 Health Hazard Rating - Slight
- 1 Flammability Rating -- Slight
- 0 Reactivity Rating -- Minimal

Not to be used as an aerosol.

Reason for Revisions: Company location change and updated regulatory changes. This MSDS replaces the February 18, 2005, MSDS.

Disclaimer:

While the information and recommendations set forth herein are believed to be accurate, we make no warranty with respect hereto and disclaim all liability from reliance thereon.

End of MSDS Document