

Material Safety Data Sheet

Material Name: Aquamate Carpet Cleaning Formula

MSDSID: REX-004

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer Information

REXAIR LLC
50 W. Big Beaver Rd., Suite 350
Troy, MI 48084

Phone: (248) 643-7222

Emergency # 1 (800) 255 3924 CHEM-TEL, INC.

General Comments

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

*** Section 2 - Composition / Information on Ingredients ***

CAS #	Substance	Percent
7732-18-5	Water	80-100
67-63-0	Isopropyl alcohol	1-5
68479-09-4	Neutralized polyacrylic acid	1-5
5324-84-5	Sodium 1-octanesulfonate	1-5
9036-19-5	Ethoxylated octylphenol	1-5
34590-94-8	Dipropylene glycol monomethyl ether	1-2

Component Information/Information on Non-Hazardous Components

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). Other components in this product are considered non-hazardous under the criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard).

*** Section 3 - Hazards Identification ***

Emergency Overview

Combustible liquid. This product is harmful by inhalation and if it is swallowed. Contact with this material can cause irritation to the skin, eyes and mucous membranes. Irritating and toxic fumes and gases may be released upon thermal processing or during combustion. Firefighters should wear full protective clothing and self contained breathing apparatus.

Potential Health Effects: Eyes

This product may cause irritation to the eyes. Prolonged or repeated contact may worsen irritation.

Potential Health Effects: Skin

This product may cause irritation to the skin. Product contains components which may be absorbed through the skin. Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis.

Potential Health Effects: Ingestion

This product may be harmful if it is swallowed. Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Potential Health Effects: Inhalation

This product can be harmful by inhalation. Inhalation of vapors or mists of the product may be irritating to the respiratory system. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.

HMIS Ratings: Health: 2 Fire: 2 Reactivity: 0 Pers. Prot.: X (Should be determined by your supervisor.)

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 4 - First Aid Measures ***

First Aid: Eyes

Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

First Aid: Skin

For skin contact, flush with large amounts of water. If irritation persists, get medical attention.

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First Aid: Ingestion

Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. If the material is swallowed, get immediate medical attention or advice.

First Aid: Inhalation

Move person to non-contaminated air. If the affected person is not breathing, apply artificial respiration. Seek medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically. This material, if aspirated into the lungs, may cause lipoid pneumonia. Treat affected person appropriately.

*** Section 5 - Fire Fighting Measures ***

Flash Point: 123°F (50.6°C)

Upper Flammable Limit (UFL): Not available

Auto Ignition: Not determined

Rate of Burning: Not determined

General Fire Hazards

Fire and explosion hazards are moderate when this product is exposed to heat or flame. Testing has shown that this product does not support sustained combustion.

Hazardous Combustion Products

Irritating and/or toxic gases may be emitted upon the product's decomposition. Carbon monoxide, carbon dioxide and other hydrocarbon fragments.

Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog. Use water to cool fire-exposed containers and to protect personnel. Avoid using a direct stream of water.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 2 Fire: 2 Reactivity: 0 Other: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures

Contain the discharged material. Dike the spilled material, where this is possible. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Block any potential routes to water systems.

Clean-Up Procedures

Wear appropriate protective equipment and clothing during clean-up. Ventilate the contaminated area. Absorb spill with inert material. Shovel material into appropriate container for disposal.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Surfaces may become slippery after spillage. Have emergency equipment readily available.

*** Section 7 - Handling and Storage ***

Handling Procedures

Avoid getting this material into contact with your skin and eyes. Do not inhale vapors or mists of this product. Use this product with adequate ventilation. Wash thoroughly after handling. Keep this product from heat, sparks, or open flame.

Storage Procedures

Keep the container tightly closed and in a cool, well-ventilated place. Eliminate all sources of ignition. Store away from strong oxidizers. All Rexair liquids are valid 6 years after the date of manufacturing.

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines

A: General Product Information

Attempts should be made to eliminate all contact with skin and eyes, and to limit inhalation exposure.

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B: Component Exposure Limits

Isopropyl alcohol (67-63-0)

ACGIH: 200 ppm TWA
400 ppm STEL
OSHA: 400 ppm TWA; 980 mg/m³ TWA
500 ppm STEL; 1225 mg/m³ STEL
NIOSH: 400 ppm TWA; 980 mg/m³ TWA
500 ppm STEL; 1225 mg/m³ STEL

Dipropylene glycol monomethyl ether (34590-94-8)

ACGIH: 100 ppm TWA
150 ppm STEL
Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA: 100 ppm TWA; 600 mg/m³ TWA
150 ppm STEL; 900 mg/m³ STEL
Prevent or reduce skin absorption
NIOSH: 100 ppm TWA; 600 mg/m³ TWA
150 ppm STEL; 900 mg/m³ STEL
Potential for dermal absorption

Engineering Controls

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear chemical goggles; face shield (if splashing is possible).

Personal Protective Equipment: Skin

Use impervious gloves. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) or under applicable Canadian standards and the Canadian Standards Association standard for the "Selection, care, and use of respirators" (CSA Standard Z94.4-02). A written respiratory protection program, including provisions for medical certification, training, fit testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage must be implemented.

Personal Protective Equipment: General

Eye wash fountain and emergency showers are recommended. Use good industrial hygiene practices in handling this material.

*** Section 9 - Physical & Chemical Properties ***

Appearance:	Lime green	Odor:	Slightly floral
Physical State:	Liquid	pH:	9.11
Vapor Pressure:	Approx. 17 mm Hg @ 68°F (20°C)	Vapor Density:	Estimated >1 (air = 1)
Boiling Point:	208.4°F (98°C) (Barometric pr. = 30.19 " Hg)	Melting Point:	Not available
Solubility (H₂O):	Complete	Specific Gravity:	1.032
Freezing Point:	30.2°F (-1°C) (Barometric pr. = 29.85 " Hg)	Particle Size:	Not applicable
Softening Point:	Not applicable	Evaporation Rate:	Estimated slower than Ethyl Ether
Viscosity:	2.67 cSt @ 68°F (20°C)	Bulk Density:	1.028 g/mL
Percent Volatile:	Approx. 70%		

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*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

Stable under normal conditions.

Chemical Stability: Conditions to Avoid

Keep away from heat, ignition sources and incompatible materials.

Incompatibility

This product may react with oxidizing agents.

Hazardous Decomposition

Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Hazardous Polymerization

Will not occur.

*** Section 11 - Toxicological Information ***

Acute and Chronic Toxicity

A: General Product Information

No information available for the product. Contact with this material can cause irritation to the skin, eyes and mucous membranes. Product contains components which may be absorbed through the skin. Excessive inhalation of this material may cause central nervous system depression. Symptoms include headache, dizziness, nausea and incoordination. Product contains component that caused inflammatory changes in the lungs of experimental animals.

B: Component Analysis - LD50/LC50

Water (7732-18-5)

Oral LD50 Rat: >90 mL/kg

Isopropyl alcohol (67-63-0)

Inhalation LC50 Rat: 72.6 mg/L/4H; Oral LD50 Rat: 4396 mg/kg; Dermal LD50 Rat: 12800 mg/kg; Dermal LD50 Rabbit: 12800 mg/kg

Ethoxylated octylphenol (9036-19-5)

Oral LD50 Rat: 4190 mg/kg

Dipropylene glycol monomethyl ether (34590-94-8)

Oral LD50 Rat: 5230 mg/kg; Dermal LD50 Rabbit: 9500 mg/kg

Carcinogenicity

A: General Product Information

No carcinogenicity data available for this product.

B: Component Carcinogenicity

Isopropyl alcohol (67-63-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999], Supplement 7 [1987], Monograph 15 [1977] (Group 3 (not classifiable))

Epidemiology

No epidemiological data is available for this product.

Neurotoxicity

No data available for this product. Excessive exposure can cause dizziness and central nervous system depression.

Mutagenicity

No data available for this product.

Teratogenicity

No information available for the product.

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Other Toxicological Information

No additional information available.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No data available for this product. Components of this product are hazardous to aquatic life.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Isopropyl alcohol (67-63-0)

Test & Species	Data	Conditions
96 Hr LC50 Pimephales promelas	9640 mg/L	
96 Hr LC50 Pimephales promelas	94900 mg/L	29 days old
96 Hr LC50 Pimephales promelas	61200 mg/L	31 days old
96 Hr EC50 Scenedesmus subspicatus	>1000 mg/L	
72 Hr EC50 Scenedesmus subspicatus	>1000 mg/L	
5 min EC50 Photobacterium phosphoreum	35390 mg/L	
48 Hr EC50 Daphnia magna	13299 mg/L	

Dipropylene glycol monomethyl ether (34590-94-8)

Test & Species	Data	Conditions
96 Hr LC50 Pimephales promelas	>10000 mg/L	
48 Hr LC50 Daphnia magna	1919 mg/L	

Environmental Fate

No data available for this product.

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Exempt from shipping regulations.

Additional Info.: Note: This product is not subject to requirements of Class 3 (flammable) and combustible liquids because it is in the guidelines of Aqueous solutions of alcohol (Part 173.150(e)(1) of the 49 CFR. This product is exempt from shipping regulations based on the criteria of the Sustained Combustibility Test according to ASTM 4206 or Appendix H of Part 173 of the 49 CFR.

TDG Information

Shipping Name: Exempt from shipping regulations.

Additional Info.: Note: Under the TDG Regulations Part II, Section 2.6 Parts IV to IX(b), this product is exempt from shipping regulations based on the criteria of alcohol solutions.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List. All components listed in this product appear on the Canadian DSL/NDSL.

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B: Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

SARA 311/312 Acute Health: Yes Chronic Health: No Fire: Yes Pressure: No Reactive: No

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements. This product contains trace levels (<0.1%) of: Formaldehyde, 1,4-Dioxane, and Ethylene oxide.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Isopropyl alcohol	67-63-0	Yes	Yes	Yes	Yes	Yes	Yes
Dipropylene glycol monomethyl ether	34590-94-8	Yes	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Canadian WHMIS Information

A: General Product Information

No additional information available.

B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Substance	CAS #	Minimum Concentration
Isopropyl alcohol	67-63-0	1 %
Ethoxylated octylphenol	9036-19-5	1 %
Dipropylene glycol monomethyl ether	34590-94-8	1 %

WHMIS Classification: B3, D2B

Additional Regulatory Information

A: General Product Information

No additional information available.

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B: Component Analysis - Inventory

Substance	CAS #	TSCA	CAN	EEC	ELINCS
Water	7732-18-5	Yes	DSL	EINECS	No
Isopropyl alcohol	67-63-0	Yes	DSL	EINECS	No
Neutralized polyacrylic acid	68479-09-4	Yes	DSL	No	No
Sodium 1-octanesulfonate	5324-84-5	Yes	DSL	EINECS	No
Ethoxylated octylphenol	9036-19-5	Yes	DSL	No	No
Dipropylene glycol monomethyl ether	34590-94-8	Yes	DSL	EINECS	No

*** Section 16 - Other Information ***

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

MSDS History

MSDS Revision Update: 09/18/2002

MSDS Revision Update: 10/05/2005

MSDS Revision Update: 04/03/2006

MSDS Revision Update: 11/22/2006

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; CAS = Chemical Abstracts Service; CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; CFR = Code of Federal Regulations; CPR = Controlled Products Regulations; DOT = Department of Transportation; DSL = Domestic Substances List; EINECS = European Inventory of Existing Commercial Chemical Substances; EPA = Environmental Protection Agency; IARC = International Agency for Research on Cancer; IATA = International Air Transport Association; mg/Kg = milligrams per Kilogram; mg/L = milligrams per Liter; mg/m3 = milligrams per Cubic Meter; MSHA = Mine Safety and Health Administration; NA = Not Applicable or Not Available; NIOSH = National Institute for Occupational Safety and Health; NJTSR = New Jersey Trade Secret Registry; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit; TDG = Transport Dangerous Goods; TSCA = Toxic Substances Control Act; WHMIS = Workplace Hazardous Materials Information System.

Contact: Bruce Shafer, V.P. of Manufacturing

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This is the end of MSDS # REX-004