

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : Patriot Chemical® Hard Water Rinse Aid
Product code : 0616

1.2. Recommended use and restrictions on use

Recommended use : Rinse aid (includes drying aids)

1.3. Supplier

Synthetic Labs
24 Victory Lane
Dracut, MA 01826 - United States
T 800.255.4050 - F 978.957.5122
www.syntecpro.com

1.4. Emergency telephone number

Emergency number : Infotrac 24 Hour Medical Emergency Number: 1-800-535-5053

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation Category 1A Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1 Causes serious eye damage

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

Hazard statements (GHS US) : Causes severe skin burns and eye damage
Causes serious eye damage

Precautionary statements (GHS US) : Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands, forearms and face thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center or doctor.
Specific treatment (see supplemental first aid instruction on this label).
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Glycolic Acid	(CAS-No.) 79-14-1	20 – 30	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation:vapour), H331 Skin Corr. 1A, H314 Eye Dam. 1, H318
Ethylene Glycol Monobutyl Ether	(CAS-No.) 111-76-2	1 – 5	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after skin contact : Irritation.
- Symptoms/effects after eye contact : Mild eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Patriot Chemical® Hard Water Rinse Aid	
No additional information available	
Glycolic Acid (79-14-1)	
No additional information available	
Ethylene Glycol Monobutyl Ether (111-76-2)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (ppm)	20 ppm

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Liquid.
- Color : Blue
- Odor : characteristic
- Odor threshold : No data available
- pH : 2
- pH solution : 2 – 3
- Melting point : Not applicable

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Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 1.05 g/m³
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Glycolic Acid (79-14-1)	
LD50 oral rat	≈ 1950 mg/kg
Ethylene Glycol Monobutyl Ether (111-76-2)	
LD50 oral rat	1746 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (ppm)	450 ppm (Equivalent or similar to OECD 403, 4 h, Rat, Female, Experimental value, Inhalation (vapours))

Skin corrosion/irritation	: Causes severe skin burns. pH: 2
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Serious eye damage/irritation	: Causes serious eye damage. pH: 2
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Mild eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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Glycolic Acid (79-14-1)	
LC50 fish 1	> 5000 mg/l (LC50; 96 h)
EC50 Daphnia 1	141 mg/l (EC50; 48 h)
Threshold limit algae 1	44 mg/l (EC50; 72 h)
Ethylene Glycol Monobutyl Ether (111-76-2)	
LC50 fish 1	1474 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 Daphnia 1	1550 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)

12.2. Persistence and degradability

Glycolic Acid (79-14-1)	
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the components available.
Biochemical oxygen demand (BOD)	0.175 g O ₂ /g substance
ThOD	0.63 g O ₂ /g substance
BOD (% of ThOD)	0.28
Ethylene Glycol Monobutyl Ether (111-76-2)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

Glycolic Acid (79-14-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.11
Bioaccumulative potential	Bioaccumulation: not applicable.
Ethylene Glycol Monobutyl Ether (111-76-2)	
Partition coefficient n-octanol/water (Log Pow)	0.81 (Test data, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

Ethylene Glycol Monobutyl Ether (111-76-2)	
Surface tension	65.03 mN/m (20 °C, 2 g/l)
Ecology - soil	Low potential for adsorption in soil.

12.5. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Glycolic Acid (79-14-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ethylene Glycol Monobutyl Ether (111-76-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Glycolic Acid (79-14-1)

Listed on the Canadian DSL (Domestic Substances List)

Ethylene Glycol Monobutyl Ether (111-76-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Component	State or local regulations
Ethylene Glycol Monobutyl Ether(111-76-2)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Hazard Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

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.