Revision Date: September 19, 2018 Revision Number: 7 supersedes 6

SAFETY DATA SHEET

1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name: AquaKleen[™] Cleaner (Type AQ)

Product ID numbers: AQ-2DR, AQ-2LP, AQ-35LF, AQ-KIT2, AQ-KIT3 AQ-XXX (Where XXX is the package code.)

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Water-based cleaning solution, no residue for precision cleaning.

List of advices against: Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

American Polywater Corporation
11222 - 60th Street North
Stillwater, MN 55082 USA
Polywater Europe BV
Zuidhaven 9-11 Unit B2
4761 CR Zevenbergen

Tel: 1-651-430-2270 Netherlands

Email: sds@polywater.com Tel: +31 (0)10 2330578 Email: sds@ polywater.com

1.4 Emergency telephone numbers

INFOTRAC: 1-800-535-5053 (USA) 1-352-323-3500 (INT'L)

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to USA OSHA 29 CFR 1910.1200 (2012) and Canada HPR (SOR/2015-17; WHMIS 2015).

Skin Irritation: Skin Irrit 3 H315 Flammable: Flam Liq 4 H227

2.2 Label elements

Contains: 1-Butoxy-2-propanol, Isopropanol Pictograms: None required.

Signal Word: Warning

Hazard Statements:

H316 Causes mild skin irritation.

H227 Combustible liquid.

Precautionary Statements:

P210 Keep away from flames and hot surfaces. No smoking.

P280 Wear protective gloves.

P332+P313 If skin irritation occurs: Get medical attention. P403 + P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local regulations.

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

 Component
 CAS #
 EC #
 Wt. %

 1-Butoxy-2-propanol
 5131-66-8
 225-878-4
 1 - 5

 Dipropylene glycol monomethyl ether
 34590-94-8
 252-104-2
 1 - 5

 Isopropanol
 67-63-0
 200-661-7
 <1</td>

4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Flush eyes with a large quantity of water for 15 minutes. If irritation continues,

seek medical attention.

Skin Contact: If skin irritation occurs, get medical attention.

Inhalation (Breathing): No first aid expected to be required. Not an inhalation hazard. **Ingestion (Swallowing):** Rinse mouth. If discomfort continues, seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Aside from information above, no additional symptoms and effects are anticipated.

4.3 Indication of immediate medical attention and special treatment needed.

No information available.

5. Firefighting Measures

5.1 Extinguishing media:

Does not apply.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition and by-products:

High temperature steam, potentially carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Sealed container can build up pressure when exposed to high heat. Cool containers with water.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid contact with eyes and skin.

6.2 Environmental precautions:

Outside spills unlikely. Absorb with sand or absorbents.

6.3 Methods materials for containment and cleaning up:

Flush small spills to drain with water.

6.4 Reference to other sections:

Refer to Sections 4, 5, 8, and 13 for more information.

7. Handling and Storage

7.1 Precautions for safe handling

Avoid unnecessary contact.

7.2 Conditions for safe storage, including incompatibilities

Keep product containers closed when not in use.

7.3 Specific end uses

See product flyer for further information.

8. Exposure Controls / Personal Protection

8.1 Control parameters

Exposure limits and recommendations:

Component Name	Limit	Standard	Source/Note
1-Butoxy-2-propanol	50 ppm	Manufacturer Recommendation	
Dipropylene glycol monomethyl ether	600 mg/m ³	OSHA PEL	
Dipropylene glycol monomethyl ether	100 ppm	ACGIH TLV	
Isopropanol	400 ppm	OSHA PEL	
Isopropanol	200 ppm	ACGIH TLV	

8.2 Exposure controls

Respiratory protection:

Normal ventilation is adequate.

Protective gloves:

For people with pre-existing skin conditions such as dermatitis the use of impermeable gloves is recommended.

Eye protection:

Eye protection is recommended, especially if the material is used in ways where it could contact the eyes.

9. Physical and Chemical

9.1 Information of basic physical and chemical properties

Appearance:Clear liquidOdor threshold:Not availablepH:NeutralFreezing point: $\sim 32^{\circ}F$ (0°C)Boiling point: $\sim 212^{\circ}F$ (100°C)Flash point:145 °F (63 °C) PMCC

Evaporation rate: Like water
Flammability (solid, gas): Not available

Upper/lower flammability or

explosive limits:

Vapor pressure:

Not available

Not available

Not available

Specific gravity ($H_2O = 1$): 0.99 Solubility in water: Complete

Partition coefficient: n-

octanol/water:Not availableAuto-ignition temperature:Not availableDecomposition temperature:Not available

9.2 Other Information

Volatiles (Weight %): 100% VOC Content: 60.4 g/l

10. Stability and Reactivity

10.1 Reactivity:

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:

Stable

10.3 Possibility of hazardous reactions:

None known.

10.4 Conditions to avoid:

None known.

10.5 Incompatible materials :

Strong oxidizing agents, strong acids.

10.6 Hazardous decomposition products:

Carbon dioxide, carbon monoxide.

11. Toxicological Information

11.1 Information on toxicological effects:

Acute toxicity

Eye contact:

Direct eye contact may cause eye irritation. This irritation is minimal and expected to be transient.

Skin contact:

This product has low skin irritation potential. There is no dermal toxicity hazard.

Irritation and Sensitization Potential:

This product has low skin irritation potential. It is not a sensitizer.

Inhalation (Breathing):

No inhalation hazard expected with water vapor.

Ingestion:

Material has low level of oral toxicity.

Toxicity to Animals

1-Butoxy-2-propanol LD_{50} (oral rat) 2,124-5,500 mg/kg

LD₅₀ (dermal rat) >2,000 mg/kg

Dipropylene glycol monomethyl ether LD₅₀ (oral rat) >5,000 mg/kg

 LD_{50} (dermal rabbit) 9,510 mg/kg LC_{50} (inhl rat) 3.35 mg/l, 7 hours

Isopropanol LD₅₀ (oral rat) 3,600 mg/kg

LD₅₀ (dermal rabbit) 12,800 mg/kg LC₅₀ (inhl rat) 16,000 ppm, 8 hours

Aspiration hazard

Not an aspiration hazard.

Chronic Exposure:

Reproductive Toxicity:Not AvailableMutagenicity:Not AvailableTeratogenicity:Not Available

Toxicologically Synergistic

Products: Not Available

Carcinogenic Status: This substance has not been identified as a carcinogen or probable

carcinogen by NTP, IARC, or OSHA, nor have any of its components.

12. Ecological Information

12.1 Ecotoxicity

1-Butoxy-2-propanol LC₅₀ 96 h Guppy 560-1,000 mg/l

LC₅₀ 48 h Daphnia magna >1,000 mg/l

Dipropylene glycol monomethyl ether LC₅₀ 96 h Fathead Minnow >10,000 mg/l

LC₅₀ 48 h Daphnia magna 1,919 mg/l

EC₅₀ 96 h Green algae >969 mg/l

Isopropanol LC₅₀ 96 h Fathead Minnow >1,000 mg/l

LC₅₀ 48 h Golden Orfe 8970 - 9280 mg/l EC₅₀ 96 h Daphnia magna >1,000 mg/l

12.2 Persistence and degradability:No information available.12.3 Bioaccumulation potential:No information available12.4 Mobility in soil:No information available.

12.5 Results of PBT and vPvBThis product is not, nor does it contain a substance that is a PBT or

Assessment: vPvB.

12.6 Other adverse effects: None known.

13. Disposal Considerations

Dispose of product in accordance with National and Local Regulations.

14. Transport Information

UN Number: Not Listed **UN Proper shipping name:** Not Applicable Transport hazard class(es): Not Applicable Packing group: Not Applicable **Environmental hazards:** None known Special precautions: None known TDG: Not Regulated ICAO/IATA-DGR: Not Regulated IMDG: Not Regulated ADR/RID: Not Regulated

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

USA Federal and State

Components

All components are listed on the TSCA inventory.

Hazard Categories for SARA Acute Chronic Fire Pressure Reactive Section 311/312 Reporting No No No No

CERCLA/SARA Sec 302 SARA Sec. 313
Hazardous Substance RQ EHS TPQ Toxic Release

Components are not affected by these Superfund regulations.

NFPA Ratings: Health: 1

Fire: 0

Reactivity: 0

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel during spill, fire or similar emergencies. Hazard ratings are based on physical and toxic properties of combustion or decomposition.

California Proposition 65

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm or has been assessed to be below OEHHA Safe Harbor exposure levels required for labeling.

European Union

Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Contains no substance on the REACH candidate list ≥ 0.1% SCL. Does not contain notified substances from the ELINCS List, Directive 92/32/EEC. Contains no REACH substances with Annex XVII restrictions.

Canada

All components are listed on the DSL inventory.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Australia

All components are listed on the AICS.

Not considered hazardous according to criteria of NOHSC Australia.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for the mixture by the supplier.

16. Other Information

Abbreviations and acronyms:

OSHA = Occupational Safety and Health Administration

CLP = Classification, Labeling and Packaging Regulation

STOT = Specific Target Organ Toxicity

LD₅₀ = Median Lethal Dose

DNEL = Derived No Effect Level

ACGIH = American Conference of Governmental Industrial Hygienists

TSCA = Toxic Substances Control Act (USA)

DSL = Domestic Substances List (Canada)

AICS = Australian Inventory of Chemical Substances

Revision Date: September 19, 2018

Revision Number: 7

Supersedes: July 27, 2017 **Other:** Not Applicable

Indication of Changes: Section 15 updated; additional California Proposition 65 information.

Written in accordance with the provisions of OSHA 1910.1200 App D and REACH

Annex II (EU No 453/2010). (GHS format)

The information and recommendations contained herein are believed to be reliable. However, the supplier makes no warranties, express or implied, concerning the use of this product. The buyer must determine conditions of safe usage and assumes all risk and liability in handling this product.