



**Arch
Chemicals,
Inc.**

**MATERIAL SAFETY
DATA SHEET**

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL: 1-800-654-6911
 FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®: 1-800-424-9300
 FOR ALL MSDS QUESTIONS & REQUESTS, CALL: 1-800-511-MSDS

PRODUCT NAME: **BAQUASPA Surface Cleaner**

1. PRODUCT AND COMPANY IDENTIFICATION

Arch Chemicals, Inc. 501 Merritt 7 PO Box 5204 Norwalk, CT 06856-5204	REVISION DATE:	12/17/2007
	SUPERCEDES:	02/26/2005
	MSDS Number:	100000002182
	SYNONYMS:	None
	CHEMICAL FAMILY:	Not Applicable/Mixture
	DESCRIPTION / USE:	Cleaner
FORMULA:	NOT APPLICABLE/MIXTURE	

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Corrosive to eyes., Mild skin irritant
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Routes of Entry:	Skin, eyes, ingestion
Chemical Interactions:	No known interactions
Medical Conditions Aggravated:	None known or reported

Human Threshold Response Data

Odor Threshold Not established for product.
 HYDROCHLORIC ACID 3 ppm
 Irritation Threshold Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	3	0	0	
NFPA	3	0	0	

Immediate (Acute) Health Effects

Inhalation Toxicity: Not expected to be an inhalation hazard at ambient conditions. If product is heated, inhalation of high concentrations of vapors may cause mild irritation to mucous membranes.

Skin Toxicity: Not expected to be toxic from dermal contact. May cause mild skin irritation. Not considered to be a primary skin irritant.



Eye Toxicity: Severe irritation and/or burns can occur following exposure. Direct contact may cause impairment of vision and corneal damage. Rinsing of the eye should take place immediately.

Ingestion Toxicity: Slightly toxic if swallowed. Ingestion may cause irritation of the gastrointestinal tract and gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting or diarrhea.

Acute Target Organ Toxicity: Corrosive to the eyes and mildly irritating to the skin.

Prolonged (Chronic) Health Effects

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Inhalation: There are no known or reported effects from chronic exposure.

Skin Contact: There are no known or reported effects from chronic exposure except for effects (if any) similar to those experienced from acute exposure.

Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.

Eye Contact: Prolonged contact may result in permanent damage. Corneal involvement or visual impairment is expected.

Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Chronic Target Organ Toxicity: There are no known or reported effects to humans from repeated exposure to this product.

Supplemental Health Hazard Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
Water	7732-18-5	
HYDROCHLORIC ACID	7647-01-0	
Surfactant	PROPRIETARY	

4. FIRST AID MEASURES

Inhalation: IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.

Skin Contact: IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.

Eye Contact: IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention immediately.



Ingestion: IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA): Product is not known to be flammable, combustible or pyrophoric.

Flammable Properties

Flash Point: Not applicable
Autoignition Temperature: Not applicable
Fire / Explosion Hazards: Material will not ignite or burn. Reacts with most metals to form flammable hydrogen gas.
Extinguishing Media: Use dry chemical, water fog, carbon dioxide (CO₂), or foam.
Fire Fighting Instructions: In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus. Use water to cool containers.
Hazardous Combustion Products: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Upper Flammable / Explosive Limit, % in air: No data
Lower Flammable / Explosive Limit, % in air: No data

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

Spill Mitigation Procedures

Air Release: Hazardous concentrations in air may be found in local spill area and immediately downwind. Vapors may be suppressed by the use of water fog. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.
Water Release: This material is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.
Land Release: Create a dike or trench to contain materials. Absorb spill with inert material (e.g., dry sand, clay, earth or commercial absorbent), then place in a chemical waste container. Do not place spill materials back in their original containers. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.
Additional Spill Information : Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.



7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid breathing mist or vapor.

Storage: Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."
Do Not Store At temperatures Above: 51 DEG°C / 125 DEG°F

Empty Container Warning: Empty containers retain hazardous residue, dispose of accordingly.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

Protective Equipment for Routine Use of Product

Respiratory Protection : Wear a NIOSH approved respirator if levels above the exposure limits are possible. A NIOSH approved full-face or half-face respirator in combination with chemical goggles.

Respirator Type : A NIOSH approved full-face air purifying respirator with acid gas cartridge. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Skin Protection : Wear impervious gloves to avoid skin contact.

Eye Protection: Use chemical goggles. Emergency eyewash should be provided in the immediate work area.

Protective Clothing Type: Butyl rubber, Neoprene, Nitrile

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
HYDROCHLORIC ACID	7647-01-0	ACGIH	2 ppm Ceiling
HYDROCHLORIC ACID	7647-01-0	OSHA Z1	5 ppm Ceiling 7 mg/m3 Ceiling
HYDROCHLORIC ACID	7647-01-0	NIOSH-IDLH	50 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: liquid
Form: Gel
Color: Clear, yellow
Odor: None
Molecular Weight: No data



Specific Gravity :	No data
pH :	Approximately 2.0
Boiling Point:	No data
Freezing Point:	No data
Melting Point:	No data
Density:	No data
Vapor Pressure:	No data
Vapor Density:	No data
Viscosity:	No data
Fat Solubility:	No data
Solubility in Water:	Soluble
Partition coefficient n-octanol/water:	No data
Evaporation Rate:	No data
Oxidizing:	No data
Volatiles, % by vol.:	No data
VOC Content	No data
HAP Content	No data

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions. Not sensitive to mechanical shock. Not sensitive to static discharge. Product will not undergo hazardous polymerization.
Conditions to Avoid:	Sparks, open flame, other ignition sources, and elevated temperatures., Contact with incompatible substances
Chemical Incompatibility:	Strong oxidizing agents, strong alkalies, metals, sulfides, cyanides, Formaldehyde
Hazardous Decomposition Products:	Carbon monoxide, Carbon dioxide, nitrogen oxides, Ammonia, Halogens, halogen acids, possible trace amounts of carbonyl halide
Decomposition Temperature:	No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

HYDROCHLORIC ACID LD50 900 mg/kg Rabbit

Dermal LD50 value:

HYDROCHLORIC ACID No data

Inhalation LC50 value:

HYDROCHLORIC ACID Inhalation LC50 1 h 3,124 ppm Rat

Product Animal Toxicity

Oral LD50 value: LD50 Believed to be approximately 3,000 mg/kg Rabbit

Dermal LD50 value: No data

Inhalation LC50 No data

value:

Skin Irritation: This material is expected to be slightly irritating., Not considered to be a primary skin irritant.



Eye Irritation: This material is expected to be corrosive.
Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.
Acute Toxicity: Corrosive to the eyes and mildly irritating to the skin.
Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Mutagenicity: Not known or reported to be mutagenic.
HYDROCHLORIC ACID This chemical has been shown to be non-mutagenic based on a battery of assays.

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.
HYDROCHLORIC ACID The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 3 substance, Unclassifiable as to Its Carcinogenicity to Humans.

12. ECOLOGICAL INFORMATION

Overview: No data for product. Individual constituents are as follows:

Ecological Toxicity Values for: HYDROCHLORIC ACID

Mosquito fish	-	96 h LC50 = 282 mg/l
Bluegill	-	48 h LC50 = 3.6 mg/l
Fathead minnow (Pimephales promelas),	-	96 h LC50 = 21.9 mg/l
Common shrimp (Crangon crangon)	-	(nominal, renewal). 48 h LC50= 260 mg/l
Daphnia magna,	-	48 h EC50= 0.492 mg/l

13. DISPOSAL CONSIDERATIONS

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal Summary : If this product becomes a waste, the following will be the hazardous code which is subject to the Land Disposal restrictions under 40 CFR 268 and must be managed accordingly. Dispose of in accordance with all Local, State, Federal, and Provincial Environmental Regulations.



Disposal Methods : As a hazardous liquid waste it must be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : D002

14. TRANSPORT INFORMATION

Land (US DOT): UN1789 HYDROCHLORIC ACID SOLUTION 8 III
Water (IMDG): UN1789 HYDROCHLORIC ACID SOLUTION, 8 III

Flash Point: Not applicable
Air (IATA): UN1789 HYDROCHLORIC ACID SOLUTION, 8 III
Emergency Response Guide Number: ERG # 157

Transportation Notes: Owing to package capacity, product may be packaged, described and marked to ship under Consumer Commodity Exception as outlined in 49 CFR.

EMS: F-A, S-B

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):
Health Immediate (Acute) Health Hazard
Physical None

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

SARA III Threshold Planning Quantity: ETHYLENE OXIDE
Value: 1,000lbs
HYDROGEN CHLORIDE (GAS ONLY)
Value: 500lbs

Reportable Quantity (49 CFR 172.101, Appendix):

CERCLA Reportable quantity: OXIRANE
ETHYLENE OXIDE
Value: 10lbs
HYDROCHLORIC ACID
Value: 5,000lbs
RCRA HAZARDOUS WASTE NO. D001
UNLISTED HAZARDOUS WASTES
CHARACTERISTIC OF IGNITABILITY



SARA III Reportable quantity: Value: 100lbs
ETHYLENE OXIDE
Value: 10lbs
HYDROGEN CHLORIDE (GAS ONLY)
Value: 5,000lbs

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

SARA III De minimis concentration: ETHYLENE OXIDE
Value: 0.1%
HYDROCHLORIC ACID (ACID AEROSOLS
INCLUDING MISTS, VAPORS, GAS, FOG, AND
OTHER AIRBORNE FORMS OF ANY PARTICLE
SIZE)
Value: 1.0%

**Clean Air Act Toxic ARP Section 112r:
CAA 112R**

US. EPA Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
CAA 112R
01 1999
Threshold quantity: 10,000lbs
ETHYLENE OXIDE

US. EPA Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
CAA 112R
01 1999
Toxic endpoint: 0.090mg/L
ETHYLENE OXIDE

US. EPA Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
CAA 112R
01 1999
Threshold quantity: 15,000lbs
HYDROCHLORIC ACID (CONC. 37% OR GREATER)

US. EPA Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
CAA 112R
01 1999
Threshold quantity: 5,000lbs
HYDROGEN CHLORIDE (ANHYDROUS)

US. EPA Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
CAA 112R
01 1999
Toxic endpoint: 0.030mg/L
HYDROCHLORIC ACID (CONC. 37% OR GREATER) HYDROGEN CHLORIDE
(ANHYDROUS)

**Clean Air Act Socmi:
HON SOC**



US. EPA Hazardous Organic NESHAP (HON) Synthetic Organic Chemicals (40 CFR 63.100-.106, Table 1)

HON SOC
07 1999
Group I
ETHYLENE OXIDE

Clean Air Act VOC Section 111:

CAA 111

US. EPA Clean Air Act (CAA) Section 111 SOCM I Intermediate or Final Volatile Organic Compounds (40 CFR 60.489)

CAA 111
01 1996
ETHYLENE OXIDE

US. EPA Clean Air Act (CAA) Section 111 SOCM I Intermediate or Final Volatile Organic Compounds (40 CFR 60.489)

CAA 111
01 1996
POLYETHYLENE GLYCOL 200

US. EPA Clean Air Act (CAA) Section 111 SOCM I Intermediate or Final Volatile Organic Compounds (40 CFR 60.489)

CAA 111
01 1996
ETHYL ALCOHOL

Clean Air Act Haz. Air Pollutants Section 112:

CAA None established

CAA 112I

US. EPA Clean Air Act (CAA) Section 112(i) High-Risk Hazardous Air Pollutants (40 CFR 63.74)

CAA 112I
01 1996
Weight factor: 10
ETHYLENE OXIDE

CAA AP

US. EPA Hazardous Organic NESHAP (HON) Hazardous Air Pollutants (40 CFR 63.100-.106, Table 2)

CAA AP
04 1999
ETHYLENE OXIDE

**State Right-to-Know Regulations Status of Ingredients
Pennsylvania:**

CAS #	COMPONENT NAME
75-21-8	OXIRANE
7647-01-0	HYDROCHLORIC ACID
64-17-5	Ethanol

PENN RTK



US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

PENN RTK
08 1989
OXIRANE

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

PENN RTK
08 1989
HYDROCHLORIC ACID

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

PENN RTK
08 1989
ETHANOL

New Jersey:

CAS #	COMPONENT NAME
75-21-8	OXIRANE
7647-01-0	HYDROCHLORIC ACID
64-17-5	Ethanol

NJ RTK

US. New Jersey Community Right-To-Know Survey, Table A: NJ Environmental Hazardous Substances [EHS] List (N.J. Admin. Code Title 7 Section 1G-2.1)

NJ RTK
2001
Substance no. 0882
ETHYLENE OXIDE

US. New Jersey Community Right-To-Know Survey, Table A: NJ Environmental Hazardous Substances [EHS] List (N.J. Admin. Code Title 7 Section 1G-2.1)

NJ RTK
2001
Substance no. 2909
HYDROGEN CHLORIDE (GAS ONLY)

US. New Jersey Community Right-To-Know Survey, Table A: NJ Environmental Hazardous Substances [EHS] List (N.J. Admin. Code Title 7 Section 1G-2.1)

NJ RTK
2001
Substance no. 1012
HYDROCHLORIC ACID (>= 37% CONCENTRATION)

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

NJ RTK
12 1989
Substance no. 0844
ETHANOL ETHYL ALCOHOL



Massachusetts:

CAS #	COMPONENT NAME
75-21-8	OXIRANE
7647-01-0	HYDROCHLORIC ACID
64-17-5	Ethanol

MASS RTK

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

MASS RTK
04 1993
ETHYLENE OXIDE

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

MASS RTK
04 1993
HYDROCHLORIC ACID HYDROGEN CHLORIDE

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

MASS RTK
04 1993
ETHANOL DENATURED ALCOHOL ETHYL ALCOHOL

California Proposition 65:

CAS #	COMPONENT NAME
64-17-5	Ethanol
75-21-8	OXIRANE

US CA CRT Carcinogenic.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

US CA CRT
06 2004
Hazard Designation:
Listed: July 1, 1987
ETHYLENE OXIDE
Carcinogenic.

US CA65CRT Developmental toxin.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

US CA65CRT
05 2005
Hazard Designation:
Listed: October 1, 1987



ETHYL ALCOHOL IN ALCHOLIC BEVERAGES
Developmental toxin.

WHMIS Hazard Classification:
WHMIS

Canada. Canadian Environmental Protection Act (CEPA). WHMIS Ingredient Disclosure List (Can. Gaz., Part II, Vol. 122, No. 2)

WHMIS
01 1988
Threshold limits: 1%
English List no. 845
HYDROGEN CHLORIDE

Canada. Canadian Environmental Protection Act (CEPA). WHMIS Ingredient Disclosure List (Can. Gaz., Part II, Vol. 122, No. 2)

WHMIS
01 1988
Threshold limits: 0.1%
English List no. 684
ETHANOL

16. OTHER INFORMATION

MSDS REVISION STATUS : Revised to meet the ANSI standard of 16 sections
SECTIONS REVISED: 4
Major References : Available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .