



FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL: 1-800-654-6911 (OUTSIDE  
USA: 1-423-780-2970)  
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®: 1-800-424-9300 (OUTSIDE  
USA: 1-703-527-3887)  
FOR ALL SDS QUESTIONS & REQUESTS, CALL: 1-800-511-MSDS (OUTSIDE  
USA: 1-423-780-2347)

PRODUCT NAME: **COSMOCIL® CQ**

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Arch Chemicals, Inc.</b> 90 Boroline Road Allendale, NJ 07401 United States of America	REVISION DATE:	11/20/2015
	SUPERCEDES:	03/08/2011
	MSDS Number:	000000022963
	SYNONYMS:	none
	CHEMICAL FAMILY:	Mixture
	DESCRIPTION / USE	Personal care
	FORMULA:	Not Applicable/Mixture

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Acute toxicity (Inhalation) : Category 4  
Skin irritation : Category 2  
Eye irritation : Category 2A  
Skin sensitisation : Sub-category 1B  
Specific target organ toxicity -  
repeated exposure : Category 1

### GHS Label element

Hazard pictograms :

Signal word : Danger

Hazard statements : H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.



H332 Harmful if inhaled.  
H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

- Prevention:**  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear eye protection/ face protection.  
P280 Wear protective gloves.
- Response:**  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.
- Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
POLYAMINOPROPYL BIGUANIDE	27083-27-8 [TSCA, AICS]/133029-32-0 [INCI]/32289-58-0 [DSL, CH, PH]	19.0 - 21.0



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## SECTION 4. FIRST AID MEASURES

General Advice:	Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Inhalation:	IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Skin Contact:	IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Eye Contact:	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Ingestion:	IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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## SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA):	Combustible above 93 deg. C / 200 deg. F.
<u>Flammable Properties</u>	
Flash Point:	> 98.5° C
Autoignition Temperature:	no data available
Fire / Explosion Hazards:	Material may be ignited only if preheated to high temperatures, for example in a fire.
Extinguishing Media:	Choose extinguishing media suitable for surrounding materials.
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:	Carbon dioxide (CO <sub>2</sub> )
Upper Flammable / Explosive Limit, % in air:	no data available
Lower Flammable / Explosive Limit, % in air:	no data available

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## SECTION 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.
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Spill Mitigation Procedures

Air Release:	Hazardous concentrations in air may be found in local spill area and immediately downwind. Contain all liquids for treatment or disposal.
Water Release:	Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so. Contain all liquids for treatment or disposal.
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. Contain all liquids for treatment or disposal. Avoid runoff into storm sewers and ditches which lead to waterways.
Additional Spill Information :	Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Stop source of spill as soon as possible and notify appropriate personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

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## SECTION 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 (dust, vapor, mist, gas). Cold temperatures may affect the physical condition but will not damage the material. Warm and mix before using.
Storage:	Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed.
Shelf Life Limitations:	Shelf life is 2 years from date of manufacture (located on the C of A) in an unopened container. Once material is opened, material should be tested to confirm in spec.
Incompatible Materials for Storage:	Refer to Section 10, "Incompatible Materials."

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Local exhaust ventilation is recommended if vapors, mists or aerosols are generated. Otherwise, use general exhaust ventilation.

Protective Equipment for Routine Use of Product

Respiratory Protection :	If vapors, mists or aerosols are generated, wear a NIOSH approved respirator.
Respirator Type :	A NIOSH approved disposable P95 Acid Gases Respirator with Exhalation Valve.
Skin Protection :	Use impervious gloves. When exposure to high concentrations are prolonged or repeated use protective boots and apron in addition to gloves.
Eye Protection:	Use chemical goggles.
Protective Clothing Type:	Impervious



General Protective  
Measures:

An eye wash and safety shower should be provided in the immediate work area.

**Components with workplace control parameters**

no data available

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid
Form	liquid
Color:	blue
Odor:	ODORLESS
Molecular Weight:	Not applicable/Mixture
pH :	5.0 - 6.0
Boiling Point:	210 °F (99 °C ) no data available
Density:	no data available
Vapor Pressure:	no data available
Vapor Density:	no data available
Viscosity:	no data available
Fat Solubility:	no data available
Solubility in Water:	soluble
Partition coefficient n- octanol/water:	no data available
Evaporation Rate:	no data available
Oxidizing:	no data available
Volatiles, % by vol.:	no data available
VOC Content	no data available
HAP Content	no data available

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## SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions. Product will not undergo hazardous polymerization.
Conditions to Avoid:	Avoid contamination.
Chemical Incompatibility:	copper, silver, sodium hydroxide, Metals
Hazardous Decomposition Products:	Carbon monoxide, Carbon dioxide, Nitrogen oxides (NO <sub>x</sub> ), Ammonia, Halogens, halogen acids, possible trace amounts of carbonyl halide
Decomposition Temperature:	no data available

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## SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology  
Oral LD50 value:



POLYAMINOPROPYL LD50 = 501 mg/kg Rat female  
BIGUANIDE

LD50 = 549 mg/kg Rat male

Component Animal Toxicology

Dermal LD50 value:

POLYAMINOPROPYL LD50 > 5,000 mg/kg Rat  
BIGUANIDE

Component Animal Toxicology

Inhalation LC50 value:

POLYAMINOPROPYL This product has been tested for acute inhalation toxicity. However, due to the  
BIGUANIDE physical nature of the product, an aerosol dust of desired particle size could not  
be generated. Therefore, no animals could be exposed and no LC50 could be  
obtained.

Product Animal Toxicity

Oral LD50 value: LD50 approximately 2,500 mg/kg Rat female LD50 approximately 2,700  
mg/kg Rat male

Dermal LD50 value: LD50 > 2,000 mg/kg Rabbit

Inhalation LC50 no data available

value:

Skin Irritation: Moderate skin irritation

Eye Irritation: This material is expected to be moderately irritating.

Skin Sensitization: Possible skin sensitizer based on animal tests, PHMB when tested at 1.0% in the  
HRIPT, PHMB did not produce irritation or allergic skin reactions.

Acute Toxicity: May cause skin, eye and mucous membrane irritation (includes upper respiratory  
tract). Ingestion may cause gastrointestinal discomfort.

Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity: No reproductive or developmental risk to humans is expected from exposure  
to this product. The active ingredient in this product has been tested in  
laboratory animals and no evidence of teratogenicity or reproductive toxicity  
was seen.

POLYAMINOPROPYL BIGUANIDE This chemical has been tested in laboratory animals  
and there was no evidence of reproductive toxicity or  
teratogenicity.

Mutagenicity: Not known or reported to be mutagenic. The active ingredient in this product  
has been tested in a battery of mutagenicity assays and was found to be  
non-mutagenic under the conditions of the tests.

POLYAMINOPROPYL BIGUANIDE This chemical has been tested in a battery of  
mutagenicity/genotoxicity assays and the results were  
negative.

Carcinogenicity: This product is not reported to be carcinogenic by IARAC, OSHA, NTP or  
COSMOCIL® CQ



EPA.

POLYAMINOPROPYL BIGUANIDE

PHMB, when administered to mice at very high doses, induced an increased incidence of cancer in mice. Under the conditions of anticipated use of this product, PHMB does not represent a risk to man.

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## SECTION 12. ECOLOGICAL INFORMATION

Overview: Ecotoxicity: Polyaminopropyl Biguanide is highly/very toxic to aquatic species. It is unlikely to bioaccumulate or persist in the aquatic environment., Environmental fate: Polyaminopropyl Biguanide will be predominantly absorbed onto sludge solids; the remainder is unlikely to be readily or inherently biodegraded or abiotically degraded with the exception of low molecular weight species., Polyaminopropyl Biguanide could be slightly inhibitory to sewage treatment systems. However, at the low concentrations typically discharged to and received by treatment systems, adverse impacts are unlikely. Polyaminopropyl Biguanide is unlikely to adversely affect plants or soil indigenous species.

### Ecological Toxicity Values for: POLYAMINOPROPYL BIGUANIDE

Rainbow trout ( <i>Salmo gairdneri</i> ),	-	96 h LC50 = 0.026 mg/l
Bluegill sunfish	-	96 h LC50 0.11 mg/l
Fish	-	chronic toxicity The No Observable Effect Concentration (NOEC): = 0.010 mg/l
Fish	-	chronic toxicity The Lowest Observable Effect Concentration (LOEC): > 0.010 mg/l
Daphnia magna,	-	48 h EC50= 0.04 mg/l
Brown Shrimp	-	96 h LC50= 9 mg/l
Daphnia magna,	-	21 day NOEC (chronic toxicity) The No Observable Effect Concentration (NOEC):= 0.0036 mg/l
Green algae,	-	96 h EC50 = 0.49 - 0.87 mg/l
	-	In an assessment of the effect of PHMB on nitrification of activated sludge micro-organisms the 4hr EC50 was 38 mg/l and the NOEC = 12 mg/l.

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## SECTION 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, it will be a nonhazardous waste according to U.S. RCRA regulations. Dispose of in accordance with all Local, State, Federal, and Provincial Environmental Regulations.

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

Potential US EPA Waste Codes : Not applicable

## SECTION 14. TRANSPORT INFORMATION

### DOT

Not dangerous goods

### TDG

UN number : 3082  
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(poly(hexamethylenebiguanide) hydrochloride)  
Class : 9  
Packing group : III  
Labels : 9

### IATA

UN number : 3082  
Description of the goods : Environmentally hazardous substance, liquid, n.o.s.  
(poly(hexamethylenebiguanide) hydrochloride)  
Class : 9  
Packing group : III  
Labels : 9MI  
Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger aircraft) : 964  
Packing instruction (passenger aircraft) : Y964

### IMDG-CODE

UN number : 3082  
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.





(poly(hexamethylenebiguanide) hydrochloride)  
Class : 9  
Packing group : III  
Labels : 9  
EmS Number 1 : F-A  
EmS Number 2 : S-F  
  
Marine pollutant : yes

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## SECTION 15. REGULATORY INFORMATION

### EPCRA - Emergency Planning and Community Right-to-Know Act

#### SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

#### Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know

No components are subject to the Pennsylvania Right to know act

#### New Jersey Right To Know

No components are subject to the New Jersey Right to know act

#### California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### The components of this product are reported in the following inventories:

TSCA : Components are for use only in formulating cosmetic products and thus, are exempt from TSCA regulations .

### Inventories



**Arch  
Chemicals,  
Inc.**

## SAFETY DATA SHEET

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

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### SECTION 16. OTHER INFORMATION

SECTIONS REVISED: 9  
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. .