Arch Chemicals, Inc.

MATERIAL SAFETY DATA SHEET

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 MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: **BAQUACIL CDX**

1. PRODUCT AND COMPANY IDENTIFICATION

Arch Chemicals, Inc.
501 Merritt 7 PO Box 5204
Norwalk, CT 06856-5204

REVISION DATE:	11/08/2011
SUPERCEDES:	02/23/2010
MSDS Number:	000000010237
SYNONYMS:	None
CHEMICAL FAMILY:	Not Applicable/Mixture
DESCRIPTION / USE	Swimming pool water treatment
FORMULA:	None established

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	**Corrosive to eyes, Moderate skin irritant, Mucous membrane irritant, Possible skin sensitizer**

Routes of Entry:	Inhalation, skin, eyes, ingestion
Chemical Interactions:	No known interactions
Medical Conditions Aggravated:	Pre-existing skin disorders.

Human Threshold Response Data

Odor Threshold	Not established for product.
Irritation Threshold	Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

Hazard Ratings :	Health	Flammability	Physical / Instability	PPI / Special hazard.
HMIS	3	0	1	
NFPA	3	0	1	

Immediate (Acute) Health Effects

Inhalation Toxicity:	Toxic by inhalation. Harmful if inhaled. Inhalation of mist or vapor may cause moderate to severe irritation to the mucous membranes of the respiratory tract.
Skin Toxicity:	Skin contact may cause moderate irritation consisting of transient redness and swelling. Prolonged exposure may cause severe redness and scab formation.
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:	May be toxic if swallowed. May be harmful if swallowed. Ingestion may cause moderate to severe irritation of the gastrointestinal tract and may also cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting or diarrhea.
Acute Target Organ Toxicity:	Corrosive to the eyes, moderately irritating to the skin and respiratory tract and moderately to severely irritating to the gastrointestinal tract.

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. The active ingredient in this product has been tested and fetotoxicity was observed in laboratory animals at doses that were also maternally toxic.
Inhalation:	There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.
Skin Contact:	Prolonged exposure may cause severe redness and scab formation.
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:	May cause allergic skin sensitization in some individuals.
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

CAS OR CHEMICAL NAME	CAS #	% RANGE
POLYETHER DIOL	25322-68-3	
Water	7732-18-5	
	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. If not breathing, give artificial respiration. Call for medical assistance.

Skin Contact: IF ON SKIN: Immediately flush skin with plenty of water for 15 minutes. If clothing comes in contact with the product, the clothing should be removed immediately and laundered before re-use. 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: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

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

Flammable Properties

Flash Point:	Not applicable
Autoignition Temperature:	No data
Fire / Explosion Hazards:	Material will not ignite or burn.
Extinguishing Media:	Not Applicable. - 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.

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:	Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suit, self-contained breathing apparatus.
Spill Mitigation Procedures	
Air Release:	Vapors may be suppressed by the use of water fog. 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. After removal, flush contaminated area thoroughly with water. Avoid runoff into storm sewers and ditches which lead to waterways. Contain all liquids for treatment or disposal.
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 and well ventilated place. Isolate from incompatible materials. Keep containers tightly closed when not in use.
Incompatible Materials for Storage:	Refer to Section 10, "Incompatible Materials."
Do Not Store At temperatures Above:	35 DEG°C / 95 DEG°F

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.

Respirator Type : A NIOSH approved air purifying respirator with organic vapor cartridge and N95 particulate filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit. A NIOSH approved full-face or half-face respirator in combination with chemical goggles.

Skin Protection : Wear impervious gloves to avoid skin contact. When exposure to high concentrations are prolonged or repeated use protective boots and apron in addition to gloves. Preferred glove barrier materials include: Butyl rubber. Polyethylene. Chlorinated polyethylene. Ethyl vinyl alcohol laminate.

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.

Exposure Limit Data

CHEMICAL NAME	CAS #	Name of Limit	Exposure
POLYETHER DIOL	25322-68-3	WEEL	10 mg/m3 TWA Particulate.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid
Form	clear
Color:	colorless to yellow
Odor:	Slightly pungent
Molecular Weight:	No data
Specific Gravity :	No data
pH :	3 - 4
Boiling Point:	No data
Freezing Point:	No data
Melting Point:	No data
Density:	1.2 - 1.3
Vapor Pressure:	No data

Vapor Density:	No data
Viscosity:	24 - 30 CPS
Fat Solubility:	No data
Solubility in Water:	No data
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. Product will not undergo hazardous polymerization.
Conditions to Avoid:	High temperatures
Chemical Incompatibility:	Strong oxidizing agents
Hazardous Decomposition Products:	Oxides of nitrogen, Carbon monoxide, Carbon dioxide, Hydrogen bromide
Decomposition Temperature:	No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology
Oral LD50 value:

POLYETHER DIOL	LD50	>	5,000 mg/kg	Rat
	LD50	=	178 mg/kg	rat female
	LD50	=	235 mg/kg	rat male

Component Animal Toxicology
Dermal LD50 value:

POLYETHER DIOL	LD50	>	2,000 mg/kg	Rabbit
	LD50	>	2,000 mg/kg	rabbit

Component Animal Toxicology
Inhalation LC50 value:

POLYETHER DIOL	LC50	No data			
	LC50	4 h	(aerosol dust) =	0.32 MG/L	rat
	LC50	1 h	(aerosol dust) =	1.28 MG/L	rat

Product Animal Toxicity

Oral LD50 value:	LD50 Believed to be approximately 800 mg/kg rat
Dermal LD50 value:	LD50 Believed to be > 2,000 mg/kg rabbit
Inhalation LC50 value:	LC50 1 h (aerosol) Believed to be approximately 6.4 MG/L rat
Skin Irritation:	This material is expected to be moderately irritating.
Eye Irritation:	This material is expected to be corrosive.
Skin Sensitization:	May cause allergic skin sensitization in some individuals.

POLYETHER DIOL

This material tested negative for skin sensitization in animals.

The results of a test on guinea pigs showed this substance to be a weak skin sensitizer.

Acute Toxicity: Corrosive to the eyes, moderately irritating to the skin and respiratory tract and moderately to severely irritating to the gastrointestinal tract.

Subchronic / Chronic Toxicity: Animal studies suggest that repeated ingestion of this product may result in damage to the kidneys and weight loss.

POLYETHER DIOL

Not known or reported to cause subchronic or chronic toxicity.

Animal studies suggest that repeated ingestion of this product may result in damage to the kidneys and weight loss.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity. The active ingredient in this product has been tested and fetotoxicity was observed in laboratory animals at doses that were also maternally toxic.

POLYETHER DIOL

This material has been tested and was found not to cause reproductive toxicity in laboratory animals.

This product has been tested and fetotoxicity was observed in laboratory animals at doses that were also maternally toxic.

Mutagenicity: Not known or reported to be mutagenic.

POLYETHER DIOL

This material has been shown to be non-mutagenic in the majority of a battery of assays. Not expected to be a mutagenic hazard.
This material has been shown to be non-mutagenic in the majority of a battery of assays. Not expected to be a mutagenic hazard.

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

POLYETHER DIOL: The carcinogenicity has been evaluated through animal study and it was found not to be carcinogenic. This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

12. ECOLOGICAL INFORMATION

Overview: Toxic to aquatic life., No data for product. Individual constituents are as follows:

Ecological Toxicity Values for: **POLYETHER DIOL**

Rainbow trout (Salmo gairdneri),	-	(nominal, static). 96 h LC50 > 20,000 mg/l
Atlantic Salmon	-	(nominal, static). 96 h LC50 > 1,000 mg/l

Ecological Toxicity Values for:

Oncorhynchus mykiss (rainbow trout)	-	static test 96 h LC50 = 1.0 mg/l
Lepomis macrochirus (Bluegill sunfish)	-	static test 96 h LC50 = 1.3 mg/l
Pimephales promelas (fathead minnow)	-	nominal 96 h LC50 = 1.8 mg/l
Cyprinodon variegatus (sheepshead minnow)	-	static test 96 h LC50 = 3.4 mg/l
Daphnia magna (Water flea)	-	static test 48 h EC50= 0.86 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, it will be a nonhazardous waste.
Disposal Methods :	As a nonhazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations.
Potential US EPA Waste Codes :	Not applicable

14. TRANSPORT INFORMATION

Land (US DOT): UN3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (DBNPA) 8 III
Water (IMDG): UN3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (DBNPA) 8 III MARINE POLLUTANT

Flash Point: Not applicable
Air (IATA): UN3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (DBNPA) 8 III
Emergency Response Guide Number: ERG # 153

Transportation Notes**:** Product not regulated for ground transport in the USA per exception permitted in 49 CFR 173.154(d). Material is not regulated as a marine pollutant for ground, rail car, or aircraft transportation within the USA if shipped in non bulk packages per marine pollutant exception 49 CFR 171.4(c).

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:

ZUS_SAR302	TPQ (threshold planning quantity)	None established

Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA	Reportable quantity	None established
ZUS_SAR302	Reportable quantity	None established

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

ZUS_SAR313	De minimis concentration	DBNPA

Clean Air Act Toxic ARP Section 112r:

CAA 112R	None established

Clean Air Act Socmi:

HON SOC	None established

Clean Air Act VOC Section 111:

CAA 111

US. EPA Clean Air Act (CAA) Section 111 SOCMI Intermediate or Final Volatile Organic Compounds (40 CFR 60.489)
01 1996
POLYETHYLENE GLYCOL 200

Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP	None established
ZUS_CAAHRP	None established
CAA AP	None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
ZUSPA_RTK	None established

New Jersey:

CAS #	COMPONENT NAME
ZUSNJ_RTK	DBNPA

Massachusetts:

CAS #	COMPONENT NAME
ZUSMA_RTK	None established

California Proposition 65:

CAS #	COMPONENT NAME
ZUSCA_P65	None established

WHMIS Hazard Classification:

None established

16. OTHER INFORMATION

MSDS REVISION STATUS :
SECTIONS REVISED: 7
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. .