



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: Poolife Exclusive Pool Care Collection Defend +
EPA Registration Number: 7364-81-1258

1. PRODUCT AND COMPANY IDENTIFICATION

Arch Chemicals, Inc. 501 Merritt 7 PO Box 5204 Norwalk, CT 06856-5204	REVISION DATE:	04/26/2012
	SUPERCEDES:	09/07/2011
	MSDS Number:	000000014341
	SYNONYMS:	None
	CHEMICAL FAMILY:	Not Applicable/Mixture
	DESCRIPTION / USE	Swimming pool water treatment
	FORMULA:	NOT APPLICABLE/MIXTURE

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	This product is not considered to be hazardous under OSHA 29 CFR 1910.1200.
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Routes of Entry:	This product will not exert a significant adverse effect to health from any route of exposure.
Medical Conditions Aggravated:	None known.

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

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

Immediate (Acute) Health Effects

Inhalation Toxicity: Not expected to cause irritation. Not expected to be toxic by inhalation.

Skin Toxicity: Skin contact may cause minor irritation consisting of transient redness and/or swelling.

Eye Toxicity: Contact would be expected to cause transient redness if not washed out and left in the eye for an extended period of time.

Ingestion Toxicity: Not expected to be toxic by ingestion. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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.

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

Sensitization: Not expected to be a skin sensitizer.

Chronic Target Organ Toxicity: None known

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>
POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE	31512-74-0	
2-PROPEN-1-AMINIUM, N,N-DIMETHYL-N-2-PROPENYL-, C	26062-79-3	



4. FIRST AID MEASURES

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.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA):	Combustible above 93 deg. C / 200 deg. F.
<u>Flammable Properties</u>	
Flash Point:	> 93 DEG°C / 200 DEG°F
Autoignition Temperature:	No data
Fire / Explosion Hazards:	Material may be ignited only if preheated to high temperatures, for example in a fire.
Extinguishing Media:	Use dry chemical, water fog, carbon dioxide (CO ₂), or foam.
Fire Fighting Instructions:	Use water spray to cool unopened containers. 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:	Not applicable
Lower Flammable / Explosive Limit, % in air:	Not applicable

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:	Vapors may be suppressed by the use of water fog.
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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.

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.

Additional Spill Information : Remove all sources of ignition. 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. Avoid freezing.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: No exposure limits exist for the constituents of this product. Additional ventilation beyond that of general exhaust is not normally required.

Protective Equipment for Routine Use of Product

Respiratory Protection : Respiratory protection not normally needed.
Skin Protection : Impervious gloves
Eye Protection: Safety glasses with side-shields
Protective Clothing Type: impervious clothing

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid
Form	liquid
Color:	Tan
Odor:	No data
Molecular Weight:	Not applicable/Mixture
Specific Gravity :	1.0 - 1.2
pH :	6 - 8
Boiling Point:	100 DEG°C / 212 DEG°F
Freezing Point:	No data
Melting Point:	Not applicable
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	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions. Product will not undergo hazardous polymerization.
Conditions to Avoid:	Sparks, open flame, other ignition sources, and elevated temperatures., Avoid freezing.
Chemical Incompatibility:	Strong oxidizing agents
Hazardous Decomposition Products:	Carbon monoxide, Carbon dioxide, Oxides of nitrogen, Hydrogen chloride
Decomposition Temperature:	No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

POLY [OXYETHYLENE (DIMETHYLIMINIO) LD50 (60% Active Ingredient) = 1,951 mg/kg rat male

ETHYLENE

POLY [OXYETHYLENE LD50 (60% Active Ingredient) = 2,587 mg/kg rat female

Poolife Exclusive Pool Care Collection Defend +

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(DIMETHYLIMINIO)
ETHYLENE
2-PROPEN-1-AMINIUM, LD50 > 5,000 mg/kg Rat
N,N-DIMETHYL-N-2-
PROPENYL-, C

Component Animal Toxicology

Dermal LD50 value:

POLY [OXYETHYLENE LD50 (60% Active Ingredient) > 2,000 mg/kg rabbit
(DIMETHYLIMINIO)
ETHYLENE
2-PROPEN-1-AMINIUM, LD50 > 20,000 mg/kg Rabbit
N,N-DIMETHYL-N-2-
PROPENYL-, C

Component Animal Toxicology

Inhalation LC50 value:

POLY [OXYETHYLENE LC50 4 h (60% Active Ingredient) = 2.9 ppm rat
(DIMETHYLIMINIO)
ETHYLENE
2-PROPEN-1-AMINIUM, No data
N,N-DIMETHYL-N-2-
PROPENYL-, C

Product Animal Toxicity

Oral LD50 value: Believed to be > 2,000 mg/kg

Dermal LD50 value: Believed to be > 2,000 mg/kg

Inhalation LC50 No data.

value:

Skin Irritation: Not expected to cause irritation.

Eye Irritation: Not expected to cause irritation.

Skin Sensitization: Not believed to be sensitising to skin.

Subchronic / Chronic Toxicity: There are no known or reported effects from chronic exposure.

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

Mutagenicity: Not known or reported to be mutagenic.

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

POLY [OXYETHYLENE A two-year rat carcinogenicity study showed a slight



(DIMETHYLIMINIO) ETHYLENE

increase in c-cell adenomas in female rats. Studies with male rats and male and female mice did not show any evidence of carcinogenic response. This product is not considered a carcinogen

12. ECOLOGICAL INFORMATION

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

Ecological Toxicity Values for: POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE

Rainbow trout (<i>Salmo gairdneri</i>),	-	96 h LC50 = 0.047 mg/l
Bluegill sunfish	-	96 h LC50 = 0.21 mg/l
Fathead minnow (<i>Pimephales promelas</i>),	-	96 h LC50 = 0.26 mg/l
Mysid shrimp	-	96 h LC50= 13 mg/l
Daphnia magna,	-	48 h LC50= 0.37 mg/l

Ecological Toxicity Values for: 2-PROPEN-1-AMINIUM, N,N-DIMETHYL-N-2-PROPENYL-, C

Bluegill sunfish	-	96 h LC50 = 0.82 - 1.3 mg/l, (40% Solution)
Rainbow trout (<i>Salmo gairdneri</i>),	-	96 h LC50 0.37 mg/l (40% Solution)
Daphnia magna,	-	48 h LC50= 0.9 mg/l (In clear water), (40% Solution)
Daphnia magna,	-	48 h LC50= 1.2 - 2.5 mg/l, (In 50 ppm clay suspension), (40% Solution)
Daphnia magna,	-	48 h LC50= 24.8 mg/l (In 1000 ppm clay suspension), (40% Solution)

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 DOES NOT meet the criteria of a



hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D. As a nonhazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

Land (US DOT): UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE]) 9 III
Water (IMDG): UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE]) 9 III MARINE POLLUTANT

Air (IATA): Flash Point: 93.33 DEG°C >
UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE]) 9 III
Emergency Response Guide Number: ERG # 171

Transportation Notes: Material is not regulated for ground transportation within the US if shipped in non-bulk packages. 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-F

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): This is an EPA registered pesticide.
EPA Pesticide Registration Number: 7364-81-1258

FIFRA Listing of Pesticide Chemicals (40 CFR 180): This product is regulated under the Federal Insecticide, Fungicide and Rodenticide Act. It must be used for purposes consistent with its labeling.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health None
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 None established

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 None established

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
14808-60-7	Quartz

ZUSPA_RTK

Pennsylvania: Hazardous substance list
1989-08-11
QUARTZ

Pennsylvania: Hazardous substance list
1990-01-01
QUARTZ DUST
hazardous substance

Pennsylvania: Hazardous substance list



1989-08-11
QUARTZ DUST

New Jersey:

CAS #	COMPONENT NAME
14808-60-7	Quartz

ZUSNJ_RTK

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

2007-03-01

SILICA, QUARTZ QUARTZ (SiO₂) SILICA, CRYSTALLINE-QUARTZ SILICA,
CRYSTALLINE

Special Health Hazard - Carcinogen

Massachusetts:

CAS #	COMPONENT NAME
14808-60-7	Quartz

ZUSMA_RTK

Massachusetts Right to Know List of Chemicals and Hazard Classifications

1994-04-01

QUARTZ SILICA, CRYSTALLINE, QUARTZ

Carcinogen, Extraordinarily hazardous

California Proposition 65:

CAS #	COMPONENT NAME
14808-60-7	Quartz

ZUSCA_P65

California Proposition 65. Safe drinking water and toxic enforcement act.

Silica, crystalline (airborne particles of respirable size)

Carcinogen

California Proposition 65. Safe drinking water and toxic enforcement act.

airborne particles of respirable size

Silica, crystalline

Carcinogen

WHMIS Hazard Classification:



Ingredient Disclosure List (WHMIS)
1988-01-20
Threshold limits: 1 Weight percent
1404
SILICA, CRYSTALLINE, QUARTZ

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 1 Weight percent
1491
Silica, crystalline, quartz

16. OTHER INFORMATION

MSDS REVISION STATUS :
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. .