



SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PANGUARD			
DATE: 5/22/2008			
TRADE NAME: PANGUARD			
GENERAL USE: Time Release Condensate Cleaner			
CHEMICAL FAMILY: Quaternary Ammonium Compounds			
PRODUCT DESCRIPTION: Solid, orange-red color.			
Manufacturers Name: Controlled Release Technologies, Inc.	DATE PREPARED: 5/22/2008		
	SUPERSEDES: 4/22/2008		
ADDRESS (NUMBER, STREET, P.O. BOX) 1016 Industry Drive	TELEPHONE NUMBER FOR INFORMATION / customer service (704) 487-0878		
(CITY, STATE AND ZIP CODE) Shelby, NC 28152	COUNTRY USA		CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER 1-800-255-3924 North America Toll Free
			01-813-248-0573 International
DISTRIBUTOR'S NAME			
ADDRESS (NUMBER, STREET, P.O. BOX)		TELEPHONE NUMBER FOR INFORMATION / customer service	
(CITY, STATE AND ZIP CODE)	COUNTRY	DISTRIBUTOR EMERGENCY TELEPHONE NUMBER	

SECTION 2 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
n-alkyl Dimethyl Benzyl Ammonium Chloride	16	68391-01-5	269-919-4	(+C)	R22,R34,R50
n-alkylDimethyl Ethylbenzyl Ammonium Chloride.	16	68956-79-6	273-318-2	(+C)	R22,R34,R50

Notes:

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
May be harmful or fatal if swallowed. Very toxic to aquatic organisms. Hazard

POTENTIAL HEALTH EFFECTS
INHALATION:
None expected due to low volatility of solid, however, any fumes generated as a secondary process are irritating
SKIN:
Irritating; irritation may result from contact.
EYES:
Contact with eyes is painful and irritating and may cause chemical burns.
INGESTION:
Irritating to digestive tract; may be harmful if swallowed.

CARCINOGENICITY:
 NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO
 CALIFORNIA, Prop.65? NO

SECTION 4 - FIRST AID MEASURES

INHALATION:
Remove affected person to fresh air; wash mouth and nasal passages with water repeatedly; if breathing difficulties persist seek medical attention.

EYES:
Check for and remove contact lenses. Immediately flush eyes for 15 minutes in clear running water while holding eyelids open; seek medical attention immediately.

SKIN:
Wash contacted area with soap and water; DO NOT attempt to neutralize with chemical agents; if irritation persists, seek medical attention.

INGESTION:
Give two glasses of water for dilution; DO NOT induce vomiting; never give anything by mouth to an unconscious person; seek medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES

GENERAL HAZARDS:
Product will support combustion. Product is corrosive. Products of combustion include compounds of carbon, hydrogen, oxygen and ammonia, including carbon monoxide. FLASH POINT-> 200° F (> 93.3° C).

EXTINGUISHING MEDIA:
Carbon dioxide, water fog, dry chemical, chemical foam.

FIRE FIGHTING PROCEDURES:
Self - contained respiratory equipment; cool containers to prevent pressure buildup and possible explosion when exposed to extreme heat. Caution - material will support combustion! Product may be irritating.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Closed containers can explode due to buildup of pressure when exposed to extreme heat.

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HAZARDOUS COMBUSTION PRODUCTS:
Smoke, fumes or vapors, oxides of carbon, ammonia.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Material is an irritant, and will irritate the eyes if product is allowed to directly contact the eyes. Wash small spills to sanitary sewer. Large spills - confine spill, shovel product into approved container for disposal. Do not discharge into lakes, ponds, streams or public waters.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures. Keep this and other chemicals out of reach of children.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH			
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
n-alkyl Dimethyl Benzyl Ammonium Chloride	*NE							
n-alkyl Dimethyl Ethylbenzyl Ammonium Chloride	*NE							

*NE-Not Established

PERSONAL PROTECTION

RESPIRATORY PROTECTION:

None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations. The use of local exhaust ventilation is recommended. Use corrosion-resistant ventilation equipment.

PROTECTIVE GLOVES:

Neoprene, butyl or nitrile rubber gloves with cuffs.

EYE PROTECTION:

Chemical splash goggles. Refer to 29 CFR 1910.133 or European Standard EN166.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Coveralls, apron, or other equipment should be worn to prevent skin contact, safety eyewash station nearby.

WORK / HYGIENIC PRACTICES:

Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR	VAPOR PRESSURE
Solid, orange-red color.	Not determined
pH	SPECIFIC GRAVITY (WATER = 1)
6.5 - 8.5	Not determined
BOILING POINT / BOILING RANGE	SOLUBILITY IN WATER
Not applicable	Appreciable (45%)
FLASH POINT	VISCOSITY
> 200 ° F (> 93.3 ° C).	Solid
FLAMMABLE LIMITS	VAPOR DENSITY (AIR = 1)
LEL: NA UEL: NA	Not determined
AUTOIGNITION TEMPERATURE	EVAPORATION RATE (WATER = 1)
NA	Not determined

SECTION 10 - STABILITY AND REACTIVITY

STABILITY	STABLE -X	CONDITIONS TO AVOID: Extreme Temperatures.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids.		
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, ammonia, fumes or vapors, and smoke may be produced.		
HAZARDOUS POLYMERIZATION: Will not occur.		CONDITIONS TO AVOID: None related to polymerization.

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
n-alkyl Dimethyl Benzyl Ammonium Chloride.	68391-01-5 269-919-4	Not established	Not established
n-alkyl Dimethyl Ethylbenzyl Ammonium Chloride.	68956-79-6 273-318-2	Not established	Not established

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SECTION 12 - ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Dispose of in accordance with local, state, and federal regulations. Refer to 40 CFR 260 - 299 for complete waste disposal regulations for corrosive materials. Consult your local, state, or federal agency before disposing of any chemicals. Do not discharge into lakes, ponds, streams or public waters. Do not reuse empty container. Triple rinse empty container with water.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not regulated.

DOT HAZARD CLASS / Pack Group: Not regulated.

REFERENCE: 49 CFR 173.154, .212, .240

UN / NA IDENTIFICATION NUMBER:

LABEL: None Required.

HAZARD SYMBOLS:

IATA HAZARD CLASS / Pack Group: Not regulated

IMDG HAZARD CLASS: Not regulated

RID/ADR Dangerous Goods Code: Not regulated

UN TDG Class / Pack Group:

Hazard Identification Number (HIN):

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 - REGULATORY INFORMATION

TSCA (Toxic Substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):

Acute Health:	Yes	Chronic Health:	No
Fire:	No	Sudden Release of Pressure:	No
Reactive:	No		

313 REPORTABLE INGREDIENTS: None

CERCLA (USA - Comprehensive Response Compensation and Liability Act): No RQ's Listed.

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: No

CPR (Canadian Controlled Products Regulations): Not Listed.

IDL (Canadian Ingredient Disclosure List): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): All components are listed on the DSL.

EINECS (European Inventory of Existing Commercial Chemical Substances): Hazardous components are listed.

WGK Water Quality Index: No Information available for this class of compounds.

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:
R22 Harmful if swallowed. R36/38 Irritating to eyes and skin*. R52 Harmful to aquatic organisms.	None Required.	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

* Product is timed release and as such releases a very limited quantity of the active ingredients over time lowering both personal and environmental hazards to lower category ratings.

SECTION 16 - OTHER INFORMATION

Notes & full R-Phrase text: Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and/or professional experience.

HMIS HAZARD RATINGS	HEALTH:	1	0 = INSIGNIFICANT
	FLAMMABILITY: <td>1<td>1 = SLIGHT</td></td>	1 <td>1 = SLIGHT</td>	1 = SLIGHT
	PHYSICAL HAZARD: <td>0<td>2 = MODERATE</td></td>	0 <td>2 = MODERATE</td>	2 = MODERATE
	PERSONAL PROTECTIVE EQUIPMENT: <td>C<td>3 = HIGH</td></td>	C <td>3 = HIGH</td>	3 = HIGH
			4 = EXTREME

REVISION SUMMARY:

Revised to current GHS/E.U. protocols 5/22/2008, supersedes 4/22/2008 issue.

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.