

PPG INDUSTRIES INC CHEMICAL DIVISION -- CALCIUM HYPOCHLORITE (120-709) --  
6810-01-358-4336

===== Product Identification =====

Product ID:CALCIUM HYPOCHLORITE (120-709)

MSDS Date:06/15/1998

FSC:6810

NIIN:01-358-4336

MSDS Number: BPVSJ

=== Responsible Party ===

Company Name:PPG INDUSTRIES INC CHEMICAL DIVISION

Address:ONE GATEWAY CENTER

City:PITTSBURGH

State:PA

ZIP:15222-1416

Country:US

Info Phone

Num:412-434-3131

Emergency Phone Num:304-843-1300

Preparer's Name:R.KENNETH LEE

CAGE:93915

=== Contractor Identification ===

Company Name:AQUA-CHEM INC, WATER TECHNOLOGIES DIV

Box:421

City:MILWAUKEE

State:WI

ZIP:53201

Country:US

Phone:202-483-7616,800-424-9300(CHEMTREC)

CAGE:09647

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLAYNE PARKWAY

Box:City:RICHMOND

State:VA

ZIP:23222

Country:US

Phone:804-264-5183/FAX: 264-5535

Contract Num:SP0450-00-M-SA54

CAGE:0YED2

Company Name:PPG INDUSTRIE

S INC CHEMICAL DIVISION  
Address:ONE GATEWAY CENTER  
City:PITTSBURGH  
State:PA  
ZIP:15222-1416  
Country:US  
Phone:304-843-1300  
CAGE:93915

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Composition/Information on Ingredients  
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Ingred Name:CALCIUM HYPOCHLORITE (CONTAINING 65% AVAILABLE CHLORINE)  
CAS:22464-76-2  
RTECS #:NH3485500  
> Wt:65.

Ingred Name:INERT INGREDIENTS (INCLUDE 5.5-10% MOISTURE)  
< Wt:35.

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Hazards Identification  
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LD50 LC50 Mixture:LD50 (RAT) = 850 MG/KG

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Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE- CORROSIVE TO ALL BODY TISSUES.

EYES/SKIN/INHALATION:IRRITATION. PULMONARY EDEMA AND EYE DAMAGE IS  
POSSIBLE. INGESTION:SEVERE BURNS TO THE DIGESTIVE TRACT AND CAN BE  
FATAL. CHROMIC:LUNG DISEASE FROM INHALATION OF DUST.

Explanation of Carcinogenicity:NONE LISTED

Effects of Overexposure:IRRITATION AND BURNS OF TISSUES; COUGHING AND  
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DIFFICULTY IN BREATHING, BURNING OF MOUTH AND STOMACH, DIARRHEA.

Medical Conditions Aggravated by Exposure:LUNG DISEASES.

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First Aid Measures  
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First Aid:EYES AND SKIN:FLUSH WITH LARGE AMOUNT OF WATER FOR ABOUT  
15-20 MINUTES; SEEK MEDICAL ATTENTION. REMOVE CONTAMINATED CLOTHING  
AND SHOES.. INHALATION:REMOVE TO FRESH AIR; IF NOT BREATHING, GIVE  
ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING  
IS DIFFICULT, GIVE OXYGEN. CALL

A PHYSICIAN. INGESTION:GIVE AT  
LEAST 3-4 GLASSES OF WATER, DO NOT INDUCE VOMITING. DO NOT GIVE  
ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. SEEK  
MEDICAL ATTENTION IMMEDIATELY.

===== Fire Fighting Measures =====

Flash Point:NONE

Extinguishing Media:USE WATER ONLY; SMOTHERING IS INEFFECTIVE; PRODUCT  
SUPPLIES ITS OWN OXYGEN.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA &  
FULL PROTECTIVE EQUIPMENT WHEN FIG  
HTING CHEMICAL FIRE. USE WATER  
SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:PRODUCT DECOMPOSES AT 180 C,RELEASING  
OXYGEN GAS;CONTAINER MAY RUPTURE

===== Accidental Release Measures =====

Spill Release Procedures:USE EXTREME CAUTION IN HANDLING SPILLED  
MATERIAL. CONTAMINATION WITH ORGANIC OR COMBUSTIBLE MATERIAL MAY  
CAUSE FIRE OR VIOLENT DECOMPOSITION. IF FIRE OR DECOMPOSITION  
OCCURS IN AREA OF SPILL, IMMEDIATELY  
DOUSE WITH PLENTY OF WATER.

OTHERWISE, SWEEP UP ALL VISIBLE MATERIAL USING A CLEAN, DRY SHOVEL  
AND BROOM AND DISSOLVE MATERIAL IN WATER.

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN COOL, DRY AND WELL VENTILATED  
AREA. KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP AWAY FROM HEAT,  
SPARKS, FLAMES, DIRECT SUNLIGHT AND OTHER SOURCES OF HEAT.

Other Precautions:WASH THOROUGHLY AFTER EACH USE.KEEP AWAY FROM FIRE,  
ORGANIC MATERIALS.KEEP OUT OF REACH OF CHILDREN.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE NIOSH APPROVED RESPIRATOR FOR DUST/MIST IF  
ABOVE PEL/TLV OR SCBA IN AN ENCLOSED AREA.

Ventilation:NONE REQUIRED UNLESS DUSTY CONDITIONS ARE ENCOUNTERED.

Protective Gloves:NATURAL OR SYNTHETIC RUBBER.

Eye Protection:SAFETY GLASSES/GOGGLES

Other Protective Equipment:PROTECTIVE CLOTHINGS. EYE-WASH FACILITIES,  
SAFETY SHOWER.

Work Hygienic Practices:AVOID

CONTACT WITH EYES AND SKIN;DO NOT BREATHE  
VAPORS/MIST/DUST.WASH THOROUGHLY AFTER EACH USE;DO NOT  
EAT,DRINK,SMOKE.

Supplemental Safety and Health

HANDLE PRODUCT VERY CAREFULLY AND USE AS DIRECTED.

===== Physical/Chemical Properties =====

HCC:D1

Boiling Pt:B.P. Text:180C DECOMP

Decomp Temp:=180.C, 356.F

pH:ALKALI

Solubility in Water:217 G/L AT 27 C.

Appearance and Odor:WHITE POWDER WITH SLIGHT CHLORINE ODOR

===== Stability and Reactivity Data =

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Stability Indicator/Materials to Avoid:NO

ACIDS,COMBUSTIBLES,ORGANICS OR REDUCING AGENTS

Stability Condition to Avoid:HIGH TEMPERATURES,ABOVE 177C

Hazardous Decomposition Products:OXYGEN AND CHLORINE GAS

===== Toxicological Information =====

Toxicological Information:ONE OF THE MAJOR USES OF CALCIUM HYPOCHLORITE  
IS AS A SOURCE OF CHLORINE FOR WATER SANITIZATION IN DRINKING AND  
RECREATIONAL WATER. STUDIES HAVE BEEN CONDUCTED TO DETERMINE THE

LONG-TERM EFFECTS OF CHLORINATED DRINKING WATER. SEVEN GENERATIONS  
OF RATS WERE GIVEN 100 PPM CHLORINE IN THEIR DRINKING WATER. NO  
DIFFERENCE IN FERTILITY, GROWTH, BLOOD PARAMETERS. OR SPECIFIC  
ORGAN TOXICITY WAS OBSERVED BETWEEN CONTROL AND EXPOSED ANIMALS.

===== Ecological Information =====

Ecological:HIGHLY TOXIC TO AQUATIC LIFE. 0.088 MG/L (BLUEGILL) 96-HOUR  
LC50.

===== Disposal Considerations =====

Waste Disposal Methods:SPILLED MATERIAL THAT HAS BEEN SWEEPED UP AND DISSOLVED IN WATER SHOULD BE USED IMMEDIATELY IN THE NORMAL APPLICATION. IF NOT POSSIBLE, CAREFULLY NEUTRALIZE BY ADDING HYDROGEN PEROXIDE (ONE PINT OF 35% HYDROGEN PEROXIDE PER POUND OF CALCIUM HYPOCHLORITE) THEN DILUTE WITH PLENTY OF WATER AND FLUSH TO SEWER.

===== MSDS Transport Information =====

Transport Information:DOT: CALCIUM HYPOCHLORITE, HYDRATED, HAZARD CLASS 5.1 (OXIDIZER), UN2880. PKG II.

===== Regulatory Information =====

SARA Title III Information:NOT LISTED IN SARA 302 OR 313. FOR SARA SECTION 311,312: FIRE HAZRD.

Federal Regulatory Information:THIS PRODUCT IS LISTED ON THE TSCA INVENTORY.

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