

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

Product ID:CALCIUM HYPOCHLORITE GRANULAR

MSDS Date:08/01/1994

FSC:6810

NIIN:00-238-8115

MSDS Number: CJNCK

=== Responsible Party ===

Company Name:OLIN CORPORATION

Address:501 MERRITT 7

Box:4500

City:NORWALK

State:CT

ZIP:06856-4500

Country:US

Info Phone Num:800-511-6737/203-356-3449

Emergency Phone Num:800-654-6911/203-356-2000

Preparer's Name:OLIN MSDS CONT

ROL GROUP

CAGE:99530

=== Contractor Identification ===

Company Name:OLIN CORP CHEMICALS GROUP

Address:120 LONG RIDGE RD

City:STAMFORD

State:CT

ZIP:06904

Country:US

Phone:203-356-3449,CHEMTREC 800-242-9300

CAGE:53084

Company Name:OLIN CORPORATION

Address:501 MERRITT 7

Box:4500

City:NORWALK

State:CT

ZIP:06856-4500

Country:US

Phone:203-750-3000/800-511-MSDS

CAGE:99530

Company Name:WALTRON LTD

Address:50 TANNERY RD

Box:70

City:WHITEHOUSE

State:NJ

ZIP:08888-0070

Country:US

Phone:908-534-5654/FAX: 908

-534-5694
Contract Num:SP0450-99-M-ND25
CAGE:71229

===== Composition/Information on Ingredients =====

Ingred Name:CALCIUM HYPOCHLORITE (CERCLA)
CAS:7778-54-3
RTECS #:NH3485000
Minumum % Wt:65.
Maxumum % Wt:75.
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.5 PPM (CL)
ACGIH TLV:0.5PPM/1STEL(CL)9596
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:SODIUM CHLORIDE
CAS:7647-14-5
RTECS #:VZ4725000
Minumum % Wt:10.
Maxumum % Wt:20.
Other REC Limits:NONE RECOMMENDED

Ingred Name:CAL
CIUM CHLORATE
CAS:10137-74-3
RTECS #:FN9800000
Minumum % Wt:0.
Maxumum % Wt:5.
Other REC Limits:NONE RECOMMENDED

Ingred Name:CALCIUM CHLORIDE
CAS:10043-52-4
RTECS #:EV9800000
Minumum % Wt:0.
Maxumum % Wt:5.
Other REC Limits:NONE RECOMMENDED

Ingred Name:CALCIUM HYDROXIDE
CAS:1305-62-0
RTECS #:EW2800000
Minumum % Wt:0.
Maxumum % Wt:4.
Other REC Limits:NONE RECOMMENDED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:5 MG/M3; 9596

Ingred Name:CALCIUM CARBONATE
CAS:471-34-1
RTECS #:FF9335000
Minumum % Wt:0.
Max

umum % Wt:4.
Other REC Limits:NONE RECOMMENDED
OSHA PEL:15 MG/M3
ACGIH TLV:10 MG/M3

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC0110000
Minumum % Wt:5.5
Maxumum % Wt:10.
Other REC Limits:NONE RECOMMENDED
OSHA PEL:NOT RELEVANT
ACGIH TLV:NOT RELEVANT

===== Hazards Identification =====

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 850 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and
Chronic:INHALATION: NOSE, MOUTH, THROAT &
LUNGS IRRITATION, RESPIRATORY TRACT BURNS, LUNG EDEMA, SHORTNESS OF
BREATH, WHEEZING, CHOKING, CHEST PAIN, & LUNG DAMAGE. EYES:
IRRITATION, BURNS, & CORNEAL DAMAGE. S KIN: SEVERE IRRITATION,
BURNS, DERMATITIS. INGESTION: IRRITATION AND/OR BURNS TO THE ENTIRE
GASTROINTESTINAL TRACT, INCLUDING STOMACH AND INTESTINES. CHRONIC:
INHALATION IMPAIRMENT OF LUNG FUNCTION AN D PERMANENT LUNG DAMAGE.
Explanation of Carcinogenicity:NOT CARCI
NOGENIC.
Effects of Overexposure:INHALATION: NOSE, MOUTH, THROAT, & LUNGS
IRRITATION, RESPIRATORY TRACT BURNS, LUNG EDEMA, SHORTNESS OF
BREATH, WHEEZING, CHOKING, CHEST PAIN, LUNG DAMAGE. EYES: SEVERE
IRRITATION, BURNS, CORNEAL DAMAG E. SKIN: SEVERE IRRITATION, BURNS,
DERMATITIS. INGESTION: BURNS, NAUSEA, VOMITING AND DIARRHEA.
Medical Cond Aggravated by Exposure:ASTHMA, RESPIRATORY, CARDIOVASCULAR
DISEASE.

===== First Aid Measures =====

First Aid:EYES: IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR 15
MIN. CALL A PHYSICIAN AT ONCE. SKIN:REMOVE CONTAMINATED CLOTHING.
IMMEDIATELY FLUSH SKIN AREA WITH WATER FOR 15 MINS. CALL A
PHYSICIAN. INGES TION: IMMEDIATELY DRINK LARGE QUANTITIES OF WATER.
DON'T INDUCE VOMITING. DON'T GIVE ANYTHING BY MOUTH IF THE PERSON
IS UNCONSCIOUS OR HAVING CONVULSIONS. INHALATION: REMOVE VICTIM TO
FRESH AIR. SUPPO RT RESPIRATION IF NEEDED. CALL PHYSICIAN

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= Fire Fighting Measures =====

Flash Point:NON-FLAMMABLE

Extinguishing Media:NOT APPLICABLE.

Fire Fighting Procedures:USE WATER TO COOL CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:DON'T USE DRY EXTINGUISHER CONTAINING
AMMONIUM COMPOUNDS.

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

Spill Release Procedures:HAZARDOUS CONCENTRATIONS IN AIR MAY BE FOUND
IN LOCAL SPILL AREA AND IMMEDIATELY DOWNWIND. REMOVE ALL SOURCES OF
IGNITION.

STOP SOURCE OF SPILL AS SOON AS POSSIBLE AND NOTIFY
APPROPRIATE PERSONNEL. THIS MATERIAL MAY BE NEUTRALIZED FOR
DISPOSAL.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:KEEP TIGHTLY SEALED. STORE IN COOL,
DRY, WELL VENTILATED AREA . DO NOT STORE AT TEMPERATURES ABOVE
125F.

Other Precautions:DON'T TAKE INTERNALLY. AVOID CONTACT WITH EYES, SKIN,
AND CLOTHES.

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= Exposure Controls/Personal Protection =====

Respiratory Protection:WEAR A NIOSH/MSHA APPROVED RESPIRATOR.

Ventilation:USE LOCAL EXHAUST VENTILATION TO MINIMIZE DUST AND CHLORINE
LEVELS.

Protective Gloves:WEAR GLOVES.

Eye Protection:CHEMICAL GOGGLES.

Other Protective Equipment:BOOTS, APRONS OR IMPERMEABLE SUIT TO AVOID
SKIN AND EYE CONTACT.

Work Hygienic Practices:REMOVE/WASH CONTAMINATED CLOTHES BEFORE REUSE.

Supplemental Safety and Health

NONE

===== Physical/

Chemical Properties =====

HCC:D1

Decomp Temp:Decomp Text:350F

Spec Gravity:BULK DENSITY:0.8 GM/CC

pH:10.5-11.5

Solubility in Water:18% @ 25C

Appearance and Odor:WHITE FREE FLOWING POWDER, CHLORINE-LIKE

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

ACIDS, ORGANICS, NITROGEN CONTAINING COMPOUNDS, DRY POWDER FIRE EXTINGUISHERS CONTAINING MONO-AMMONIUM PHOSPHATE), CORROSIVE, FLAMMABLE OR COMBUSTIBLE MATERIALS.

Stability Condition to Avoid:AVOID HIGH TEMPERATURES ABOVE 125F, HIGH HUMIDITY. PRODUCT MAY BE UNSTABLE AT TEMPERATURES ABOVE 350F(177C).

Hazardous Decomposition Products:CHLORINE GAS.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Toxicological Information:THIS PRODUCT HAS THE POTENTIAL TO BE IMMEDIATELY DANGEROUS TO LIFE OR HEALTH. WARNING STATEMENT AND WARNING PROPERTIES: HARMFUL IF INHALED OR INGESTED. HARMFUL IF EXPOSED TO SKIN OR EYES.

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

Ecological:IF THIS PRODUCT BECOMES A WASTE, IT WILL BE A HAZARDOUS WASTE WHICH IS SUBJECT TO THE LAND DISPOSAL RESTRICTIONS UNDER 40 CFR 368 AND MUST BE MANAGED ACCORDINGLY. CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THIS MATERIAL. THE USER OF THIS 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.

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

Waste Disposal Methods:AS A HAZARDOUS SOLID WASTE, IT MUST BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, LOCAL REGULATIONS. IN A PERMITTED HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITY BY TREATMENT. EPA HAZARDOUS WASTE NUMBER: D001.

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

Transport Information:THIS MATERIAL IS REGULATED AS A DOT HAZARDOUS MATERIAL. DOT DESCRIPTION FROM THE HAZAROUUS MATERIALS TABLE 49 CFR 172.101: LAND (U.S.DOT): CALCIUM HYPOCHLORITE, HYDRATED MIXTURES, HAZARD CLASS: 5.1, U N 2880, PG II. WATER (IMO): SAME AS ABOVE. AIR (IATA/ICAO): SAME AS ABOVE. HAZARD LABEL/PLACARD: OXIDIZER. REPORTABLE QUANTITY: 10 LBS. (PER 49 CFR 172.101.APPENDIX), EMERGENCY GUID E NO: 45.

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

SARA Title III Information:SUPERFUND AMENDMENT AND REAUTHORIZATION ACT TITLE III: HAZARD CATEGORIES, PER 40 CFR 370.2: HEALTH: IMMEDIATE (ACUTE).PHYSICAL: FIRE AND REACTIVITY. Federal Regulatory Information:THIS SUBSTANCE IS LISTED ON THE TOXIC SUBSTANCES CONTROL ACT INVENTORY. NSF LIMITS: NSF MAXIMUM DRINKING WATER USE CONCENTRATION : 46 MG/L AS CALCIUM HYPOCHLORITE.

===== Other Information =====

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