

ARCH CHEMICALS, INC. -- HTH DRY CHLORINE GRANULAR -- 6810-00-255-0471

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

Product ID:HTH DRY CHLORINE GRANULAR

MSDS Date:03/23/2001

FSC:6810

NIIN:00-255-0471

Status Code:A

MSDS Number: CLPCM

=== Responsible Party ===

Company Name:ARCH CHEMICALS, INC.

Address:501 MERRITT 7

Box:5204

City:NORWALK

State:CT

ZIP:06856-5204

Country:US

Info Phone Num:800-511-MSDS

Emergency

Phone Num:800-654-6911

Resp. Party Other MSDS Num.:00002-0182-14432

Chemtec Ind/Phone:(800)424-9300

CAGE:TO530

=== Contractor Identification ===

Company Name:ARCH CHEMICALS, INC.

Address:501 MERRITT 7

Box:5204

City:NORWALK

State:CT

ZIP:06856-5204

Country:US

Phone:800-511-MSDS

CAGE:TO530

Company Name:TELECHEM INTERNATIONAL, INC

Address:524 E WEDDELL DRIVE SUITE 3

Box:City:SUNNYVALE

State:CA

ZIP:94089-2115

Country:US

Phone:916-941-3688

Contract Num:SP0450-01-M-ZH76

CAGE:1KH20

===== Comp

osition/Information on Ingredients =====

Ingred Name:CALCIUM HYPOCHLORITE
CAS:7778-54-3
RTECS #:NH3485000
Minumum % Wt:60.
Maxumum % Wt:80.
Other REC Limits:C3 MG/M3 AS CL2
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.

Ingred Name:CALCIUM CHLORATE
CAS:10137-74-3
RTECS #:FN9800000
Minumum % Wt:0.
Maxumum % Wt:5.

Ingred Name:CALCIUM CHLORIDE
CAS:10043-52-4
RTECS #:EV9800000
Minumum % Wt:0.
Maxumum %
Wt:5.

Ingred Name:CALCIUM HYDROXIDE
CAS:1305-62-0
RTECS #:EW2800000
Minumum % Wt:0.
Maxumum % Wt:4.
OSHA PEL:15 MG/M3
ACGIH TLV:5 MG/M3

Ingred Name:CALCIUM CARBONATE
CAS:471-34-1
RTECS #:FF9335000
Minumum % Wt:0.
Maxumum % Wt:5.
OSHA PEL:5 MG/M3 RESPIRABLE
ACGIH TLV:10 MG/M3

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC0110000
Minumum % Wt:5.5
Maxumum % Wt:10.

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

LD50 LC50 Mixture:ORAL (RAT) = 850 MG/KG.
Routes of Entry: Inhalat

ion:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and Chronic:ACUTE-INHALATION: DUST OR VAPOR CAN BE IRRITATING TO THE NOSE, MOUSE, THROAT, AND LUNGS. IN CONFINED AREAS, CAN RESULT IN HIGH CONCENTRATIONS OF CHLORINE VAPOR, EITHER OF WHICH MAY RESULT IN BURNS TO THE RESPIRATORY TRACT, PRODUCING LUNG EDEMA, SHORTNESS OF BREATH, WHEEZING, CHOKING, CHEST PAIN, IMPAIRMENT OF LUNG FUNCTION AND POSSIBLE PERMANENT LUNG DAMAGE.

EYE: SEVERE IRRITATION &/OR BURNS, MAY CAUSE IMPAIRMENT OF VISION AND CORNEAL DAMAGE. SKIN: SEVERE IRRITATION, BURNS.

INGESTION:IRRITATION OR BURNS TO GI TRACT INCLUDING STOMACH & INTESTINE. CHRONIC: LUNG & SKIN DAMAGE

Explanation of Carcinogenicity:THIS PRODUCT IS NOT KNOWN OR REPORTED TO BE CARCONOGENIC BY ANY REFERENCE SOURCE, INCLUDING:IARC, OSHA, NTP OR EPA. ONE HUNDRED MICE WERE EXPOSED DERMALLY 3 TIMES A WEEK FOR 18 MONTHS TO A SOLUTION OF CALCIUM HYPOCHLORIT

E. HISTOPATHOLOGICAL

EXAMINATION FAILED TO SHOW AN INCREASED INCIDENCE OF TUMORS.

Effects of Overexposure:ACUTE-INHALATION:IRRITATION, BURNS TO THE RESPIRATORY TRACT, LUNG EDEMA, SHORTNESS OF BREATH, WHEEZING, CHOKING, CHEST PAINS, IMPAIRMENT OF LUNG FUNCTION AND POSSIBLE PERMANENT LUNG DAMAGE. EYES:IRRIT ATION, BURNS, IMPAIRMENT OF VISION, CORNEAL DAMAGE. SKIN:IRRITATION, BURNS, REDNESS, SWELLING, SCAB FORMATION. INGESTION:IRRITATION, BURNS TO GASTROINTESTINAL TRACT,

INCLUDING THE STOMACH AND INTESTIN ES, NAUSEA, VOMITING, DIARRHEA, ABDOMINAL PAIN, BLEEDING, TISSUE ULCERATION.

CHRONIC-INGESTION:TISSUE DISTRUCTION.

Medical Cond Aggravated by Exposure:ASTHMA, RESPIRATORY AND CARDIOVASCULAR DISEASE.

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

First Aid:EYES:IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING THE UPPER AND LOWER EYELIDS. CALL A PHYSICIAN AT ONCE. SKIN: IMMEDI

ATELY FLUSH WITH WATER FOR AT

LEAST 15 MINUTES. CALL A PHYSICIAN. IF CLOTHING COMES IN CONTACT WITH THE PRODUCT, IT SHOULD BE REMOVED IMMEDIATELY AND LAUNDERED BEFORE REUSE. INGESTION: IMMEDIATELY DRINK LARGE QUANTITIES OF WATER. DO NOT INDUCE VOMITING. CALL A PHYSICIAN AT ONCE. DO NOT GIVE ANYTHING BY MOUTH IF THE PERSON IS UNCONSCIOUS OR IF HAVING CONVULSIONS. INHALATION; REMOVE VICTIM TO FRESH AIR. SUPPORT RESPIRATION IF NEEDED. CALL A PHYSICIAN.

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

Extinguishing Media:WATER ONLY

Fire Fighting Procedures:USE WATER TO COOL CONTAINERS EXPOSE TO FIRE.
RESPONSE TO THIS MATERIAL REQUIRES THE USE OF A FULL ENCAPSULATED
SUIT AND A NIOSH APPROVED POSITIVE PRESSURE SUPPLIED AIR
RESPIRATOR.

Unusual Fire/Explosion Hazard:THIS PRODUCT IS CHEMICALLY REACTIVE WITH
MANY SUBSTANCES. ANY CONTAMINATION OF THE PRODUCT WITH OTHER
SUBSTANCES BY SPILL OR OTHERWISE MAY RESULT IN A CHEMICA
L REACTION

AND FIRE. THIS PRODUCT IS A STR ONG OXIDIZER WHICH IS CAPABLE OF
INTENSIFYING A FIRE ONCE STARTED.

===== 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.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Ha
ndling and Storage =====

Handling and Storage Precautions:KEEP PRODUCT TIGHTLY SEALED IN
ORIGINAL CONTAINERS. STORE PRODUCT IN A COOL, DRY, WELL-VENTILATED
AREA BELOW 125F. STORE AWAY FROM COMBUSTIBLE OR FLAMMABLE PRODUCTS.
KEEP PRODUCT PACKAGING CLEAN AND F REE OF ALL CONTAMINATION.

Other Precautions:DO NOT TAKE INTERNALLY. AVOID INHALATION OF DUST &
FUMES. AVOID CONTACT WITH EYES, SKIN OR CLOTHING. UPON CONTACT WITH
SKIN OR EYES, WASH OFF WITH WATER. REMO
VE AND WASH CONTAMINATED
CLOTHING BEFORE R EUSE.

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

Respiratory Protection:WEAR NIOSH APPROVED RESPIRATOR IF DUSTS ARE
CREATED. NIOSH APPROVED FULL FACE-PIECE RESPIRATOR WITH CHLORINE
CARTRIDGES AND DUST/MIST PREFILTER.

Ventilation:USE LOCAL EXHAUST VENTILATION TO MINIMIZE DUST AND CHLORINE
LEVELS WHERE INDUSTRIAL USE OCCURS. OTHERWISE ENSURE GOOD GENERAL
VENTILATION.

Protective Gloves:NEOPRENE GLOVES.

Eye Pro

tection:CHEMICAL GOGGLES

Other Protective Equipment:WHERE INDUSTRIAL USE OCCURS, FULL IMPERMEABLE SUIT MAY BE REQUIRED. WEAR PROTECTIVE NEOPRENE CLOTHING: BOOTS, APRON, PROTECTIVE SUIT.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health
NONE SPECIFIED BY MANUFACTURER.

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

HCC:D1

Decomp Temp:=170.C, 338.F

Decomp Text:170-180C;338-356F

Vapor Pres:N/A @ 25C

pH:10.5-11.5

Solubility in Water

:APPROXIMATELY 18% @ 25C

Appearance and Odor:WHITE, FREE FLOWING POWDER.

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

Stability Indicator/Materials to Avoid:YES

THIS PRODUCTS IS CHEMICALLY REACTIVE WITH MANY SUBSTANCES, INCLUDING, E.G., OTHER POOL TREATMENT PRODUCTS, ACIDS, ORGANICS, NITROGEN-CONTAINING COMPOUNDS, DRY POWDER FIRE EXTINGUISHERS, OXIDIZERS, CORROSIVE, FLAMMABLE OR CO

Stability Condition to Avoid:TEMPERATURES ABOVE 170C (338F); STORAGE AT EM

PERATURES >125F (52C). PREVENT INGRESS OF HUMIDITY AND MOISTURE INTO CONTAINER OR PACKAGE. ALWAYS CLOSE THE LID.

Hazardous Decomposition Products:CHLORINE GAS.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Toxicological Information:ANIMAL TOXICITY: ACUTE: INHLATION LC50: APPROX: 1300 MG/M3 (1 HR, RAT). ORAL LD50 RAT = 850 MG/KG. DERMAL LD50 > 2 G/KG (RABBIT). CAUSES BURNS TO EYES AND SKIN. CHRONIC TOXICITY

FOR ANIMAL: THERE ARE NO KNOWN OR REPORTED EFFECTS FROM REPEATED EXPOSURE.

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

Ecological:AQUATIC TOXICITY: BLUEGILL, 96 HOUR LC50: 0.088 MG/L. TOXICITY TO WILD LIFE: BOBWHITE QUAIL, DIETARY LC50: > 5,000 PPM. MALLARD DUCKLINGS, DIETARY LC50: > 5,000 PPM.

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

Waste Disposal Methods:IF THIS PRODUCT BECOMES A WASTE, IT MEETS THE CRITERIA OF A HAZARDO

US WASTE AS DEFINED UNDER 40CFR261 & WOULD
HAVE THE FOLLOWING EPA HAZARDOUS WASTE NUMBER:D001. AS A HAZARDOUS
SOLID WASTE, IT MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL,
STATE &FEDERAL REGULATIONS IN A PERMITTED HAZARDOUS WASTE TRE
ATMENT, STORAGE & DISPOSAL FACILITY BY TREATMENT.

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

Transport Information:DOT: CALCIUM HYPOCHLORITE, HYDRATED MIXTURES,
5.1, UN2880, II. LABEL: OXIDIZER. RQ = 10 LBS.

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

SARA Title III Information:SARA : PER 40CFR 370.2: HEALTH: IMMEDIATE
(ACUTE); PHYSICAL: FIRE, REACTIVITY.
Federal Regulatory Information:TSCA INVENTORY STATUS: THIS MATERIAL IS
LISTED ON THE TSCA INVENTORY. REGUALTED UNDER FIFRA, USDA & FDA.

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

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