



CARISAL -- CALCIUM CHLORIDE 77%  
MATERIAL SAFETY DATA SHEET  
Name: CALCIUM CHLORIDE 77%

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General Information  
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Item Name: CALCIUM CHLORIDE FLAKE  
Company's Name: CARISAL, LLC  
Company's Address: 8300 Greensboro Drive Suite 800 #151  
Company's City: MCLEAN  
Company's State: VA  
Company's Country: US  
Company's Zip Code: 22102  
Company's Emerg Ph #: 703-623-0055  
Company's Info Ph #: 703-287-8703  
Date MSDS Prepared: 01SEPT2006  
Safety Data Review Date: 05SEPT2006  
MSDS Preparer's Name: TOM MCGONIGLE  
Hazard Characteristic Code: N1

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Ingredients/Identity Information  
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Proprietary: NO  
Ingredient: CALCIUM CHLORIDE  
Ingredient Sequence Number: 01  
Percent: 77-80%  
NIOSH (RTECS) Number: EV9800000  
CAS Number: 10043-52-4  
OSHA PEL: NOT ESTABLISHED  
ACGIH TLV: NOT ESTABLISHED  
Other Recommended Limit: NONE RECOMMENDED

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Physical/Chemical Characteristics  
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Appearance And Odor: FLAKE;WHITE;ODORLESS  
Boiling Point: >2912F,>160  
Melting Point: 1440F,782C  
Specific Gravity: 2.15  
Decomposition Temperature: UNKNOWN  
Solubility In Water: APPRECIABLE  
Percent Volatiles By Volume: NIL  
Corrosion Rate (IPY): UNKNOWN

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Fire and Explosion Hazard Data  
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Flash Point: NONE  
Extinguishing Media: WATER FOG.  
Special Fire Fighting Proc: USE A SELF-CONTAINED BREATHING APPARATUS  
AND FULL PROTECTIVE EQUIPMENT.  
Unusual Fire And Expl Hazrds: NONE SPECIFIED BY MANUFACTURER.

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Reactivity Data  
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Stability: YES  
Cond To Avoid (Stability): NONE SPECIFIED BY MANUFACTURER.  
Materials To Avoid:STRONG MINERAL ACIDS, NON-FERROUS AND FERROUS METALS.  
Hazardous Decomp Products: NONE SPECIFIED BY MANUFACTURER.  
Hazardous Poly Occur: NO

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Health Hazard Data  
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LD50-LC50 Mixture: ORAL LD50 (RAT) IS 1000MG/KG  
Route Of Entry - Inhalation: YES  
Route Of Entry - Skin: YES  
Route Of Entry - Ingestion: NO  
Health Haz Acute And Chronic: EYES:MAY CAUSE IRRITATION.SKIN:MAY CAUSE IRRITATION AND DRYNESS.INGEST:MAY CAUSE RESPIRATORY IRRITATION.  
Carcinogenicity - NTP: NO  
Carcinogenicity - IARC: NO  
Carcinogenicity - OSHA: NO  
Explanation Carcinogenicity: THERE ARE NO INGREDIENTS ABOVE 0.1% WHICH ARE IDENTIFIED AS CARCINOGENS BY NTP, IARC OR OSHA.  
Signs/Symptoms Of Overexp: EYES:STINGING, REDNESS, SWELLING, TEARING. INGEST:NAUSEA, VOMITING, DIARRHEA. SKIN:REDNESS, BURNING, CRACKING.  
Med Cond Aggravated By Exp: PERSONS WITH PRE-EXISTING SKIN AILMENTS MAY BE AT INCREASED RISK FROM EXPOSURE.  
Emergency/First Aid Proc: SKIN:REMOVE CONTAMINATED CLOTHING;WASH WITH SOAP AND WATER.EYES:FLUSH WITH WATER FOR 15 MINUTES.INHAL:REMOVE TO FRESH AIR.GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED.INGEST:GET PROMPT QUALIFIED MEDICAL ATTENTION.IF CONSCIOUS,GIVE 1-2 GLASSES OF WATER AND INDUCE VOMITING.

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Precautions for Safe Handling and Use  
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Steps If Matl Released/Spill: VENTILATE AREA.USE PROPER PROTECTIVE AND RESPIRATORY EQUIPMENT.SWEEP OR VACUUM;DO NOT CREATE DUST;PLACE IN A DRY CONTAINER FOR DISPOSAL.CLEAN SPILL AREA WITH WATER.  
Neutralizing Agent: NOT APPLICABLE.  
Waste Disposal Method: DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.  
Precautions-Handling/Storing: STORE IN A COOL, DRY, WELL-VENTILATED PLACE. KEEP CONTAINER CLOSED WHEN NOT IN USE.KEEP AWAY FROM INCOMPATIBLE MATERIALS.  
Other Precautions: EMPTY CONTAINERS MAY CONTAIN HAZARDOUS RESIDUE;DISPOSE OF PROPERLY.

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Control Measures  
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Respiratory Protection: WHERE ENVIRONMENTAL CONTROLS ARE LACKING OR IN ENCLOSED SPACES USE A NIOSH/MSHA APPROVED RESPIRATOR FOR DUST/FUMES.  
Ventilation: LOCAL VENTILATION AT THE WORKSITE;MECHANICAL(GENERAL) VENTILATION TO MAINTAIN TLV/PEL.  
Protective Gloves: PVA  
Eye Protection: CHEMICAL SPLASH GOGGLES  
Other Protective Equipment: PROTECTIVE CLOTHING, AS NEEDED.PROVIDE A LOCAL EYE WASH STATION AND SAFETY SHOWER.  
Work Hygienic Practices: USE REASONABLE CARE IN HANDLING THIS PRODUCT.WASH HANDS AFTER USE AND BEFORE EATING.



Suppl. Safety & Health Data: NONE

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Transportation Data  
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DOT PSN Code: ZZZ  
DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
IMO PSN Code: ZZZ  
IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION  
IATA PSN Code: ZZZ  
IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
AFI PSN Code: ZZZ  
AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
MMAC Code: NR  
Additional Trans Data: NONE

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Disposal Data  
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Label Data  
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Label Required: YES  
Label Status: F  
Common Name: CALCIUM CHLORIDE 77% FLAKE  
Signal Word: CAUTION!  
Acute Health Hazard-Slight: X  
Contact Hazard-Slight: X  
Fire Hazard-None: X  
Reactivity Hazard-None: X  
Special Hazard Precautions: EYES:MAY CAUSE IRRITATION.SKIN:MAY CAUSE IRRITATION AND DRYNESS.INGEST:MAY CAUSE GI TRACT IRRITATION.INHAL:MAY CAUSE RESPIRATORY IRRITATION. STORE IN A COOL, DRY, WELL-VENTILATED PLACE.KEEP CONTAINER CLOSED WHEN NOT IN USE.KEEP AWAY FROM INCOMPATIBLE MATERIALS. FLUSH WITH WATER FOR 15 MINUTES.INHAL:REMOVE TO FRESH AIR.GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED.INGEST:GET PROMPT QUALIFIED MEDICAL ATTENTION.IF CONSCIOUS,GIVE 1-2 GLASSES OF WATER AND INDUCE VOMITING BY STICKING FINGER DOWN THROAT OR BY GIVING IPECAC.  
Protect Eye: Y  
Protect Skin: Y