Product ID:RENACIDIN(POWDER FOR RECONSTITUTION) MSDS Date:01/23/1991 FSC:6505 NIIN:00-781-2319 **MSDS Number: BSFJC** === Responsible Party === **Company Name: UNITED-GUARDIAN INC** Address:230 MARCUS BLVD. City:HAUPPAUGE State:NY ZIP:11788-3701 Country:US Info Phone Num:516-273-0900 Emergency Phone Num:516-273-0900 Preparer's Name: JAMES A. BELL CAGE:17983 === Contractor Identification === Company Name: UNITED-GUARDIAN INC Address:230 MARCUS BLVD. Box:City:HAUPPAUGE State:NY ZIP:11788-3701 Country:US Phone:516-273-0900 CAGE:17983

Ingred Name:CITRIC ACID (TIR STATES 165 GRAMS/300 GRAM TOTAL) CAS:77-92-9 RTECS #:GE7350000 Other REC Limits:NONE RECOMMENDED

Ingred Name: GLUCONOLACTONE (TIR STATES (25 GRAMS GLUCONLACTONE

/300 GRAMS
TOTAL)
CAS:90-80-2
RTECS #:LZ5184000
Other REC Limits:NONE RECOMMENDED

Ingred Name:MAGNESIUM CARBONATE (TIR STATES 81 GRAMS MGCO3/300GRAMS TOTAL)

Other REC Limits:NONE RECOMMENDED

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic: EYES: CAN CAUSE IRRITATION. SKIN: CAN CAUSE IRRITATION.INHAL:CAN IRRITATE.INGEST:POSSIB LE IRRITATION OF MUCOUS MEMBRANES.MAY ACT AS A LAXATIVE. Explanation of Carcinogenicity: THERE ARE NO INGREDIENTS ABOVE 0.1% WHICH ARE IDENTIFIED AS CARCINOGENS BY NTP, IARC OR OSHA. Effects of Overexposure: IRRITATION OF EYES, SKIN AND MUCOUS MEMBRANES. Medical Cond Aggravated by Exposure: PERSONS WITH PRE-EXISTING RESPIRATORY AILMENTS MAY BE AT INCREASED RISK FROM EXPOSURE. First Aid: EYES: FLUSH WITH WATER FOR 15 MINU **TES.SKIN:WASH WITH** WATER.INHAL:REMOVE TO FRESH AIR.INGEST:DO NOT INDUCE VOMITING.CONSULT A PHYSICIAN.

Flash Point:>250F,>121C

Extinguishing Media:WATER,DRY CHEMICAL,CARBON DIOXIDE.

Fire Fighting Procedures:USE A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE EQUIPMENT.

Unusual Fire/Explosion Hazard:MAY EMIT MGO IF HEATED TO DECOMPOSITION TEMPERATURE.

Spill Release Procedures:SOLID:PICK UP WITH OUT MAKING DUST.SOLUTION:SOAK UP WITH AN INERT ABSORBANT;PLACE IN A PROPER CONTAINER FOR DISPOSAL. Neutralizing Agent:NONE

Handling and Storage Precautions:MATERIEL IS HYGROSCOPIC.STORE IN A COOL,DRY AREA IN CLOSED CONTAINERS. Other Precautions:NONE

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

Respiratory Protection:WHERE ENVIRON MENTAL CONTROLS ARE LACKING OR IN ENCLOSED SPACES USE A NIOSH APPROVED DUST MASK. Ventilation:LOCAL EXHAUST Protective Gloves:RUBBER. Eye Protection:SAFETY GOGGLES. Other Protective Equipment:LAB COAT OR WORK APRON. Work Hygienic Practices:USE GOOD LABORATORY PRACTICES. Supplemental Safety and Health

NONE

HCC:N1 pH: 3SOLN Solubility in Water:COMPLETE Appearance and Odor:WHITE POWDER,HYGROSCOPIC;ODOR NOT REPORTED

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Stability Indicator/Materials to Avoid:YES WATER,STRONG OXIDIZING AGENTS. Stability Condition to Avoid:DIRECT CONTACT WITH WATER,HEAT. Hazardous Decomposition Products:CARBON DIOXIDE,CARBON MONOXIDE,MAGNESIUM OXIDE. Conditions to Avoid Polymerization:AVOID DIRECT CONTACT WITH WATER.

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH FEDERAL,STATE AND LOCAL

REGULATIONS.

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