002329

MANUFACTURER/DISTRIBUTOR NAME:

H & S MANUFACTURING, INC.

ADDRESS:

EMERGENCY TELEPHONE NUMBER:

727 EAST BROADWAY WILLISTON, ND 58801 CONTACT YOUR LOCAL POISON INFORMATION CENTER PHONE (24 hr) TECHNICAL (800) 827-3091

EFFECTIVE DATE: 5/1/96	
DIATOMACEOUS EARTH PERCENTAGE: 13-33% Speci	h 0/0 HA-127 0/0 ivity 0/0 B7-129 al 0/0
CAS REG. NO.: NOT EST.  TLV: 10mg/M3  PHYSICAL DATA  PHYSICAL DATA  VAPOR PRESSUR  VAPOR DENSIT  PRINCENT VOLATILE BY VOLUME: 0	NA 123 RE: N/A NA 1239
EVAPORATION RATE: N/A SOLUBILITY IN WATER: NEGLIGIBLE SOLUBILITY IN WATER: NEGLIGIBLE APPEARANCE AND ODOR: GRANULAR WHITE SOLID WITH FRAGRANT ODOR APPEARANCE AND ODOR: GRANULAR WHITE SOLID WITH FRAGRANT ODOR	

FIRE AND EXPLOSIVE DATA

FLAMMABLE LIMITS: N/A

FLASH POINT: NONE

UEL: N/A

EXTINGUISHING MEDIA: WATER, CO2, FOAM, DRY CHEMICAL LEL: N/A

SPECIAL FIRE FIGHTING PROCEDURES: AVOID STRONG OXIDIZING AGENTS

UNUSUAL FIRE AND EXPLOSION HAZARDS: PRODUCT BECOMES SLIPPERY WHEN WET DUE TO GEL FORMATION

# REACTIVE HAZARDS

CONDITIONS TO AVOID: KEEP AWAY FROM HEAT AND OPEN FLAMES

INCOMPATABILITY: HYDROFLOURIC ACID, STRONG OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: HIGH DUST CONCENTRATIONS

EFFECTS OF OVEREXPOSURE: MAY CAUSE TEMPORARY IRRITATION OR INFLAMMATION OF THE EYE, NOSE

AND BRONCHI.

# FIRST AID PROCEDURE

INHALATION: REMOVE PERSON TO FRESH AIR WATER FOR SEVERAL MINUTES. SKIN OR EYE CONTACT: FLUSH WITH RUNNING WATER FOR SEVERAL MINUTES.

INGESTION: DRINK LARGE QUANTITY OF WATER. DO NOT INDUCE VOMITING. SEE A PHYSICIAN.

HANDLING PROCEDURES STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: VACUUM DRY SPILL. BECAME WET AND GELLED, SHOVEL UP OR HOSE IT DOWN WITH COPIOUS AMOUNTS OF WATER.

SURFACE UPON WHICH MATERIAL HAS BEEN APPLIED WILL BECOME SLIPPERY WHEN WET. COMPLY WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO MAJOR WASTE DISPOSAL METHOD:

PRECAUTIONS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE IN COOL, DRY PLACE TO PROTECT PRODUCT FROM MOISTURE. KEEP OUT OF REACH OF CHILDREN. OPERATORS APPLYING LARGE RCPA: NON-HAZARDOUS

PHODUCT FROM MOISTURE. REEF OUT OF RESPIRATORS AND ROBLES PINATORS P

RESPIRATORY PROTECTION (SPECIFY TYPE): FOR USE WITH LARGE AMOUNTS OF MATERIAL 2000 FAR NIOSH APPROVED RESPIRATOR AS REQUIRED. SPECIAL PROTECTION INFORMATION

VENTILATION: MECHANICAL EXHAUST IS ADEQUATE. PROTECTIVE GLOVES: NOT REQUIRED. EYE PROTECTION: WHEN APPLYING LARGE AMOUNTS OF MATERIAL, USE APPROVED GOGGLES. OTHER PROTECTIVE EQUIPMENT: NOT REQUIRED.

02,10,12

CO2329

MATERIAL SAFETY DATA SHEET (MSDS)

MANUFACTURER/DISTRIBUTOR NAME:

ADDRESS:

EMERGENCY TELEPHONE NUMBER:

HAZARDOUS COMPOSITION (>1%): INEXT INTEDIENTS (>94%) CHEMICAL FORMULA: N.A.

MOLECULAR WEIGHT: N.A.

CIFA ADOPTED NAME:

EFFECTIVE DATE: 5/1/96 H & S MANUFACTURING, INC.

727 EAST BROADWAY WILLISTON, ND 58801

CONTACT YOUR LOCAL POISON INFORMATION CENTER

PHONE (24 hr) TECHNICAL (800) 827-3091

PRODUCT NAME! CHLORINE CONCENTRATE

N.A.

IDENTIFICATION

HMIS: Health 0/0

SODIUM HYPOCHLORITE (<6%)

Fire 0/0 Reactivity 1/1

Special N/A

CAS NUMBER: 7681-52-9

SYNONYMS: N.A.

PHYSICAL DATA

BOILING POINT (DEGREES F.): 217 VAPOR DENSITY (AIR=1): 19.2 MELTING POINT: N.A.

SPECIFIC GRAVITY (WATER=1): 1.087 FREEZING POINT: N.A. SATURATION IN AIR: N.A.

VAPOR PRESSURE (MM HG.): 16 EVAPORATION RATE (\*=1): N.A.

PH: 12.4 VOLATILES BY WEIGHT (%): 88 AUTO IGNITION TEMP: N.A. APPEARANCE/ODOR: PALE YELLOW LIQUID WITH TYPICAL LIQUID BLEACH ODOR. SOLUBILITY IN WATER: COMPLETE

FLASH POINT (F)/METHOD USED: N.A. FLAMMABLE LIMITS (LEL/UEL): N.A.

REACTIVITY

STABILITY: UNSTABLE

CONDITIONS TO AVOID: SEE INCOMPATIBILITY BELOW

POLYMERIZATION (HAZARDOUS): WILL NOT OCCUR

INCOMPATIBLE MATERIALS: ACIDS, AMMONIA, ORGANIC COMPOUNDS, HEAVY METALS AND SALTS THEREOF, AND OXIDIZING OR REDUCING COMPOUNDS

HAZARDOUS DECOMPOSITION PRODUCTS: CHLORINE, CHLORINE DIOXIDE, CHLORAMINES

ENVIRONMENTAL IMPACT APPLICABLE REGULATIONS: NONE

SHIPPING NAME: SEE PRODUCT NAME

DOT/EPA HAZARD CLASS: N.A.

HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LIMITS (PEL): N.A.

THRESHOLD LIMIT VALUES (TLV): N.A.

WARNING SIGNALS: RESPIRATORY, OCULAR IRRITATION

EFFECTS OF OVER EXPOSURE: INHALATION: RESPIRATORY TRACT IRRITATION, PULMONARY EDEMA

INGESTION: MAY CAUSE BURNING SENSATION & IRRITATION OF MUCOUS

MEMBRANES WITH PROMPTEMESIS

VESICULAR ERUPTIONS AND ECZEMATOID DERMATITUS SKIN: EYES:

IRRITATION-MILD TO MODERATE FROM VAPORS

EXPOSURE CONTROL METHODS

ENGINEERING: NONE

SKIN PROTECTION: NONE EYE PROTECTION: NONE

RESPIRATORY PROTECTION: NONE

WORK PRACTICES

HANDLING: USE NORMAL PRECAUTIONS FOR HANDLING CAUSTIC SUBSTANCES.

SHOULD BE STORED BELOW 90 DEGREES F. SHOULD NOT BE EXPOSED TO DIRECT SUNLIGHT

NORMAL CLEAN UP: DILUTE WITH COPIOUS AMOUNTS OF WATER AND THEN MOP UP.

WASTE DISPOSAL: FLUSH WITH WATER TO SEWER IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL

# EMERGENCY PROCEDURES

FIRE & EXPLOSION HAZARD: BLEACH DECOMPOSES WHEN HEATED TO HIGH TEMPERATURES: RESPIRATORY PROTECTION. DECOMPOSITION PRODUCTS MAY CAUSE

CONTAINERS TO RUPTURE.

EXTINGUISHING METHODS: N.A.

2

RELEASE TO ENVIRONMENT/SPILL PROCEDURES: AVOID FUMES FROM SPILLED LIQUIDS, DILUTE

# FIRST AID AND MEDICAL EMERGENCY PROCEDURES

EYES: RINSE THOROUGHLY WITH WATER, SEEK MEDICAL ASSISTANCE.

SKIN: RINSE THOROUGHLY WITH WATER.

INHALATION: REMOVE TO FRESH AIR: SUPPORT RESPIRATION. INGESTION: SWALLOW IMMEDIATELY MILK, EGG WHITE, MILK OF MAGNESIA, OR STARCH PASTE.

# MATERIAL SAFETY DATA SHEET (MSDS)

ICI AMERICAS INC.

PHONE (24 hr) TECHNICAL (302) 886-3000

MEDICAL (800) 327-8633

WILMINGTON, DELAWARE 19897 ISSUE DATE: 08/02/89

Hibistat

HAZARD SUMMARY (AS DEFINED BY OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200): HEALTH HAZARDS: INHALATION (TLV), EYE IRRITANT PHYSICAL HAZARDS: FLAMMABLE LIQUID

### INGREDIENTS

CHLORHEXIDINE GLUCONATE (CAS 18472-51-0)

ISOPROPYL ALCOHOL (CAS 67-63-0)

EMOLLIENTS (NONHAZARDOUS)

WATER

0.5% OSHA PEL: NOT LISTED

70.0% OSHA PEL: 400 ppm

OSHA PEL: NOT LISTED 1.5%

28.0%

INGREDIENTS NOT PRECISELY DESCRIBED ARE PROPRIETARY OR NONHAZARDOUS. VALUES ARE NOT PRODUCT

SPECIFICATIONS. GT=GREATER THAN, LT=LESS THAN, CA=APPROXIMATELY

PHYSICAL DATA

BOILING POINT: ABOVE 150°F

VAPOR DENSITY (AIR=1): NO DATA

pH: NO DATA

% VOLATILE BY VOLUME: ABOUT 98

VAPOR PRESSURE (mmHG AT 20°C): NO DATA

SOLUBILITY IN WATER: SOLUBLE

SPECIFIC GRAVITY: 04812-0.901

APPEARANCE AND ODOR: CLEAR LIQUID WITH ALCOHOL ODOR

# FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (AND METHOD): 68.6°F (SETAFLASH CC)

AUTOIGNITION TEMP .: NO DATA

EXTINGUISHING MEDIA: WATER FOG, ALCOHOL FOAM, CARBON DIOXIDE, DRY CHEMICAL, HALOGENATED

SPECIAL FIRE FIGHTING PROTECTIVE EQUIPMENT: SELF-CONTAINING BREATHING APPARATUS WITH FULL UNUSUAL FIRE AND EXPLOSION HAZARDS: FLAMMABLE LIQUID. HEAVY VAPORS CAN FLOW ALONG SURFACES

TO DISTANT IGNITION SOURCES AND FLASH BACK.

# REACTIVITY DATA

STABILITY: STABLE UNDER NORMAL CONDITIONS

HAZARDOUS DECOMPOSITION PRODUCTS: COMBUSTION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE, NITROGEN OXIDES, AMMONIA, HALOGEN, HALOGEN ACIDS,

POSSIBLE TRACE AMOUNTS OF CARBONYL HALIDE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

### HEALTH HAZARD ASSESSMENT

GENERAL: NO TOXICITY INFORMATION IS AVAILABLE ON THIS SPECIFIC PREPARATION: THIS HEALTS HAZARD ASSESSMENT IS BASED ON INFORMATION THAT IS AVAILABLE ON ITS COMPONENTS.

INGESTION: THE ACUTE ORAL  $\mathrm{LD}_{50}$  IN RAT IS PROBABLY ABOVE 5 g/kg. RELATIVE TO OTHER MATERIALS, A SINGLE DOSE OF THIS PRODUCT IS PRACTICALLY NONTOXIC BY INGESTION

EYE CONTACT: THIS MATERIAL IS PROBABLY SLIGHTLY IRRITATING TO HUMAN EYES. REPORTS HAVE ALSO INDICATED THAT CHLORHEXIDINE GLUCONATE, A COMPONENT OF THIS PREPARATIO CAN CAUSE SEVERE AND PERMANENT EYE INJURY (BLINDNESS) FOLLOWING PROLONGED

SKIN CONTACT: NO IRRITATION IS LIKELY TO DEVELOP FOLLOWING REPEATED AND/OR PROLONGED CONTACT WITH HUMAN SKIN.

SKIN ABSORPTION: SYSTEMICALLY TOXIC CONCENTRATIONS ARE UNLIKELY TO BE ABSORBED THROUGH

INHALATION: VAPORS AND AEROSOL CAN PRODUCE IRRITATION OF EYES, NOE AND THROAT.

OTHER EFFECTS OF OVEREXPOSURE: DEPRESSION, HEADACHE, NAUSEA, VOMITING, IRRITATION OF EYE NOSE AND THROAT. CHLORHEXIDINE GLUCONATE HAS BEEN REPORTED TO CAUSE DEAFNESS IF INSTILLED INTO THE MIDDLE EAR THROUGH PERFORATED EAR DRUMS. ANAPHYLACTOID REACT

HAVE BEEN DESCRIBED FOLLOWING EXCESSIVE TISSUE AND/OR MUCOUS MEMBRANE ABSORPTION FIRST AID PROCEDURES: SKIN: WASH MATERIAL OFF THE SKIN WITH PLENTY OF SOAP AND WATER. IF REDNESS, ITCHING OR A BURNING SENSATION DEVELOPS, GET MEDICAL ATTENTION AND DISCONTINUE USE. EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER. AFTER INITIAL FLUSHIN

REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. HAVE EYES EXAMINED AND TREATED BY MEDICAL PERSONNEL. INGESTION: GIVE ONE OR TWO GLASSES OF WATER TO DRINK. IF GASTROINTESTINAL SYMPTOMS DEVELOP, CONSULT MEDICAL PERSONNEL. (NEVE GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON).

INHALATION: REMOVE VICTIM TO FRESH AIR. IF COUGH OR OTHER RESPIRATO

SYMPTOMS DEVELOP, CONSULT MEDICAL PERSONNEL.

### SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: ELIMINATE SOURCE OF IGNITION AND VENTILATE SPILL AREA. WEAR SKIN, EYE AND RESPIRATORY PROTECTION DURING CLEANUP. SOAK UP LIQUID WITH ABSORBENT AND SHOVEL INTO WASTE CONTAINER. USE A NON-SPARKING SHOVEL AND OTHER EQUIPMENT. COVER CONTAINER AND REMOVE FROM WORK AREA. WASH RESIDUE FROM SPILL AREA WITH WATER AND FLUSH TO A SEWER SERVICED BY A WASTEWATER TREATMENT

DISPOSAL METHOD: BECAUSE OF A FLASH POINT BELOW 140°F, DISCARDED PRODUCT IS A HAZARDOUS WASTE, NO. D001, UNDER RDRA, 40 CFR 261.21. DISPOSE OF IN FACILITY PERMITTED FOR

CONTAINER DISPOSAL: EMPTY CONTAINER RETAINS HAZARDOUS RESIDUE. OBSERVE ALL HAZARD PRE CAUTIONS. KEEP AWAY FROM HEAT, SPARKS AND FLAMES. DO NOT USE CUITING OR WELDING TORCH ON OR NEAR CONTAINERS OF THIS PRODUCT. DO NOT DISTRIBUTE, MAKE AVAILABLE, FURNISH OR REUSE EMPTY CONTAINER EXCEPT FOR STORATE AND SHIPMENT OF ORIGINAL PRODUCT. EMPTY CONTAINER, REMOVE ALL HAZARDOUS RESIDUE. PUNCTURE OR OTHERWISE DESTROY EMPTY CONTAINE

### SPECIAL PROTECTION INFORMATION

GENERAL: THE FOLLOWING PRECAUTIONS PERTAIN TO HANDLING INDUSTRIAL QUANTITIES. VENTILATION: USE LOCAL EXHAUST TO KEEP EXPOSURES TO A MINIMUM.

RESPIRATORY PROTECTION (SPECIFY TYPE): USE MSHA/NIOSH APPROVED RESPIRATOR FOR DUSTS, MISTS AND FUMES WHOSE TLV is greater than 0.05 mg/m<sup>3</sup> in combination with an organic vapor

PROTECTIVE CLOTHING: IMPERVIOUS GLOVES AND APRON.

EYE PROTECTION: CHEMICAL TIGHT GOGGLES; FULL FACESHIELD IN ADDITION IF SPLASHING IS PC. BI OTHER PROTECTIVE EQUIPMENT: EYEWASH STATION AND SAFETY SHOWER IN WORK AREA.