MATERIAL SAFETY DATA SHEET (MSDS)

MANUFACTURER/DISTRIBUTOR NAME:

H & S MANUFACTURING, INC.

JUL 1 6 1993

ADDRESS:

727 EAST BROADWAY WILLISTON, ND 58801

EMERGENCY TELEPHONE NUMBER:

CONTACT YOUR LOCAL POISON INFORMATION CENTER PHONE (24 hr) TECHNICAL (800) 827-3091

EFFECTIVE DATE: 01/07/89

PRODUCT NAME: SPRINGTIME™ CLEAN-UP ABSORBENT POWDER

Hep-Aid Vomitus Clean-up Kit

INGREDIENTS

DIATOMACEOUS EARTH

CAS REG. NO.: NOT EST.

PERCENTAGE: 15-35%

TLV: 10mg/M3

PHYSICAL DATA

BOILING POINT: N/A

SPECIFIC GRAVITY: N/A

VAPOR PRESSURE: N/A VAPOR DENSITY: N/A

PERCENT VOLATILE BY VOLUME: 0

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: NEGLIGIBLE

APPEARANCE AND ODOR: GRANULAR WHITE SOLID WITH FRAGRANT ODOR

FIRE AND EXPLOSIVE DATA

FLASH POINT: NONE

FLAMMABLE LIMITS: N/A

LEL: N/A

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

SPECIAL FIRE FIGHTING PROCEDURES: AVOID STRONG OXIDIZING AGENTS

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

REACTIVE HAZARDS

PRODUCT STABLE: YES

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

HEALTH HAZARDS

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

AND BRONCHI.

FIRST AID PROCEDURE

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

INGESTION: ADMINISTER EMETICS (NOT TO UNCONSCIOUS PERSON) OR OBTAIN STOMACH WASH OUT

(STOMACH TUBE).

HANDLING PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: VACUUM DRY SPILL. IF 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.

WASTE DISPOSAL METHOD: COMPLY WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO MAJOR

PRECAUTIONS.

RCPA: NON-HAZARDOUS

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

AMOUNTS OF PRODUCT SHOULD WEAR APPROVED DUST RESPIRATORS AND GOGGLES.

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE): FOR USE WITH LARGE AMOUNTS OF MATERIAL. WEAR

NIOSH APPROVED RESPIRATOR AS REQUIRED.

VENTILATION: MECHANICAL EXHAUST IS ADEQUATE. PROTECTIVE GLOVES: NOT REQUIRED.

EYE PROTECTION: WHEN APPLYING LARGE AMOUNTS OF MATERIAL, USE APPROVED GLOVES.

ATTLED DEATECTIVE FAITPMENT: NOT REQUIRED.

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CONTACT YOUR LOCAL POISON INFORMATION CENTER

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

EFFECTIVE DATE: 02/05/88

PRODUCT NAME: CHLORINE CONCENTRATE

IDENTIFICATION

HAZARDOUS COMPOSITION (> 1%):

SODIUM HYPOCHLORITE (<6%)

CHEMICAL FORMULA: N.A. MOLECULAR WEIGHT: N.A. CTFA ADOPTED NAME: N.A.

CAS NUMBER: 7681-52-9

SYNONYMS: N.A.

PHYSICAL DATA

BOILING POINT (DEGREES F.): 217

MELTING POINT: N.A. FREEZING POINT: N.A.

VAPOR DENSITY (AIR=1): 19.2

SATURATION IN AIR: N.A.

SPECIFIC GRAVITY (WATER=1): 1.087 VAPOR PRESSURE (MM HG.): 16

PH: 12.4

EVAPORATION RATE (*=1): N.A.

AUTO IGNITION TEMP: N.A.

VOLATILES BY WEIGHT (%): 88

SOLUBILITY IN WATER: COMPLETE

APPEARANCE/ODOR: PALE YELLOW LIQUID WITH TYPICAL LIQUID BLEACH ODOR.

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

DOT/EPA HAZARD CLASS: N.A.

SHIPPING NAME: SEE PRODUCT NAME

HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LIMITS (PEL):

THRESHOLD LIMIT VALUES (TLV): N.A.

WARNING SIGNALS: RESPIRATORY, OCULAR IRRITATION

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

MAY CAUSE BURNING SENSATION & IRRITATION OF MUCOUS INGESTION:

MEMBRANES WITH PROMPTEMESIS

SKIN: VESICULAR ERUPTIONS AND ECZEMATOID DERMATITUS

EYES: IRRITATION-MILD TO MODERATE FROM VAPORS

EXPOSURE CONTROL METHODS

ENGINEERING: NONE

EYE PROTECTION: NONE

SKIN PROTECTION: NONE

RESPIRATORY PROTECTION: NONE

WORK PRACTICES

HANDLING: USE NORMAL PRECAUTIONS FOR HANDLING CAUSTIC SUBSTANCES.

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

FOR EXTENDED PERIODS OF TIME.

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

ORDINANCES.

EMERGENCY PROCEDURES

FIRE & EXPLOSION HAZARD: BLEACH DECOMPOSES WHEN HEATED TO HIGH TEMPERATURES: USE

RESPIRATORY PROTECTION. DECOMPOSITION PRODUCTS MAY CAUSE

CONTAINERS TO RUPTURE.

EXTINGUISHING METHODS: N.A.

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

COPIOUSLY.

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

WILMINGTON, DELAWARE 19897

ISSUE DATE: 08/02/89

MEDICAL (800) 327-8633

PRODUCT NAME: HIBISTAT® LIQUID

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

OSHA PEL: 400 ppm 70.0%

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

FLAMMABLE LIMITS (STP): 2-12% (ISOPROPYL ALCOHOL)

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

AGENTS. SPECIAL FIRE FIGHTING PROTECTIVE EQUIPMENT: SELF-CONTAINING BREATHING APPARATUS WITH FULL FACEPIECE AND PROTECTIVE CLOTHING.

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

INCOMPATIBILITY (MATERIALS TO AVOID): NONE KNOWN

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 HEALTH HAZARD ASSESSMENT IS BASED ON INFORMATION THAT IS AVAILABLE ON ITS COMPONENTS.
- INGESTION: THE ACUTE ORAL 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 PREPARATION, CAN CAUSE SEVERE AND PERMANENT EYE INJURY (BLINDNESS) FOLLOWING PROLONGED CONTACT WITH EYE TISSUE.
- 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 THE SKIN IN MAN.
- INHALATION: VAPORS AND AEROSOL CAN PRODUCE IRRITATION OF EYES, NOE AND THROAT.
- OTHER EFFECTS OF OVEREXPOSURE: DEPRESSION, HEADACHE, NAUSEA, VOMITING, IRRITATION OF EYES, NOSE AND THROAT. CHLORHEXIDINE GLUCONATE HAS BEEN REPORTED TO CAUSE DEAFNESS IF INSTILLED INTO THE MIDDLE EAR THROUGH PERFORATED EAR DRUMS. ANAPHYLACTOID REACTIONS 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 FLUSHING, 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. (NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON).

INHALATION: REMOVE VICTIM TO FRESH AIR. IF COUGH OR OTHER RESPIRATORY 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 FACILITY.
- 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 HAZARDOUS WASTE.

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 $0.05~\text{mg/m}^3$ in combination with an organic vapor cartridge.

PROTECTIVE CLOTHING: IMPERVIOUS GLOVES AND APRON.

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