COMPLIES WITH OSHA HCS 29, OFR 1910.1200-ND OSHA 174

PRODUCT NAME USED ON LABEL: ELUE RIBBON BLEACH EPA REG ( SIZES: QUART, HALF GALLON, GALLON )

EMERGENCY CONTACT NUMBER: 1-800-424-9300

MANUFACTORER SECTION #1

> PATTERSON LABORATORIES. INC. 11930 PLEASANT AVEUNE DETROIT, MI 48217

TELEPHONE NUMBER FOR GENERAL INFORMATION: 1-313-843-4500

HAZARDOUS INGREDIENTS/INDENTITY INFORMATION SECTION #2

INHERT INGREDIENTS:

94.75% 5.25%

SODIUM HYPOCHLORTIE:

FINISHED PRODUCT: OSHA (PEL)-N/A

ACGIH (TLV)-N/A

HAZARDOUS COMPONENTS:

CHEMICAL COMMON NAME: CAS NUMBER SODIUM HYPOCHLORITE 7681-52-9

PEL/TLV-SOURCE 1PPM 1PPM

(CHLORINE

(CHLORINE

GAS)

GAS)

SECTION #3 PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 217 F DEGREES MELTING POINT: N/A VAPOR DENSITY (AIR=1): 19.2 FREEZING POINT: 12 F DEGREES

PH: 12.4 VAPOR PRESSURE (MMHG): 16

EVAPORATION RATE: (\*=1): N/A

VOLATILES BY WEIGHT (%): 90 SPECIFIC GRAVITY (WATER=1) 1.082 \*BUTYL ACETATE

SOLUBILITY IN WATER: COMPLETE

APPEARANCE/ODOR: PALE YELLOW LIQUID WITH A TYPICAL BLEACH (CHLORINE) ODOR, FREE FROM HAZE OR SEDIMENT.

SECTION #4 FIRE & EXPLOSIVE HAZARD DATA

FLASH POINT (0-F)/METHOD USED: N/A FLAMMABLE LIMITS (LEL/UEL): NON FLAMMABLE SOLUTION EXTINGUISHING MEDIA: USE WATER IN FLOODING QUANTITIES AS

SPECIAL FIRE FIGHTING PROCEDURED: WEAR NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS FOR CHLORINE GAS VAPORS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY. UNUSUAL FIRE & EXPLOSIVE HAZARDS: BLEACH DECOMPOSES WHEN HEATED TO HIGH TEMPERATURES AND CONTAINERS MY RUPTURE.

PAGE 1 OF 3 PATTERSON LABORATORIES, INC.

BLUE RIBBON BLEACH - HOUSEHOLD.....CONTINUED

SECTION #5

## REACTIVITY DATA

STABILITY: UNSTABLE IN LIGHT. TEMPERATURES ABOVE 90F DEGREES CONDITIONS TO AVOID: HEAT & LIGHT CHEMICAL INCOMPATIBILITY: ACIDS, AMMONIA, ORGANIC COMPOUNDS, HEAVY METALS AND SALTS THEREOF, AND OXIDIZING OR REDUCING COMPOUNDS. HAZARDOUS DECOMPOSITION PRODUCTS: CHLORINE, CHLORINE DIOXIDE, CHLORAMINES. DECOMPOSITION OF PRODUCTS MAY CAUSE CONTAINERS TO RUPTURE. HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION #6

CONTAINED THEREIN.

HEALTH HAZARD DATA

ROUTE OF ENTRY: INHALATION-LIKELY SKIN-LIKELY INGESTION-UNLIKELY

HEALTH HAZARDS: (ACUTE) - DEPENDING ON SOLUTION CONCENTRATION MATERIAL MAY BE CORROSIVE TO SKIN, MUCOUS MEMBRANES AND EYES. VAPORS (CHRONIC)-MAY CAUSE DAMAGE OR INJURY TO EYES. SKIN AND RESPIRATORY ORGANS.

NTP IARC MONOGRAPHS CARCINOGENICITY: NTP OSHA REGULATED NOT DETERMINED FOR PRODUCT OR HAZARDOUS INGREDIENTS

EFFECTS OF OVER-EXPOSURE TO PRODUCT:

INHALATION: INHALATION OF VAPORS MAY CAUSE BRONCHIAL IRRITATION, COUGHING, DIFFICULT BREATHING OR PULMONARY EDEMA INGESTION: IF SWALLOWED, MAY CAUSE BURNING SENSATION AND CORROSION LARYNGEAL EDEMA, MAUSEA AND VOMITING.

SKIN: SKIN CONTACT MAY RESULT IN BLISTERING AND ECZEMA EYES: ACCIDENTAL EYE CONTACT WITH LIQUID VAPORS MY PRODUCE MODERATE TO SEVERE IRRITATION.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE

SECTION #7 PRECAUTIONS FOR SAFE HANDLING AND USE

EYE PROTECTION: AVOID EYE CONTACT. WEAR PROTECTIVE SAFETY GOGGLES.

SKIN PROTECTION: AVOID PROLONGED SKIN CONTACT. WEAR PROTECTIVE CLOTHING, RUBBER GLOVES, BOOTS, AND FACE SHIELD. RESPIRATORY PROTECTION: AVOID INHALATION OF FUMES. WEAR NIOSH APPROVED RESPIRATORY PROTECTION.

PAGE 2 OF 3 PATTERSON LABORATORIES, INC.

SECTION #7 PRECAUTIONS FOR SAFE HANDLING AND USE ... CONT

HANDLING: USE NORMAL PROCEDURES FOR HANDLING CAUSTIC SUBSTANCES. STORE IN A COOL DARK PLACE AWAY FROM HEAT, LIGHT AND COMBUSTIBLE MATERIALS. STORE BELOW 90 F DEGREES. KEEP CONTAINERS WELL CLOSED BY CHECKING CAP FOR TIGHTNESS. PROVIDE ADEQUATE VENTILATION.

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

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

SECTION #8 FIRST AID MEDICAL EMERGENCY PROCEDURES

EYES: FLUSH EYES THOROUGHLY MICH RUNNING WATER FOR AT LEAST 15 MINUTES SKIN: RINSE THOROUGHLY WITH HUNNING WATER. IF IRRITATION PERSISTS, CONTACT PHYSICIAN OR LOCAL POISON CONTROL CENTER INHALATION: IF EFFECTS OCCUR, REMOVE VICTIM TO FRESH AIR. PROVIDE SYMPTOMATIC CARE AND SUPPORT RESPIRATION. GET PROMPT MEDICAL ATTENTION.

SECTION 9 CONTROL MEASURES-OCCUPATIONAL

RESPIRATORY PROTECTION: (SPECIFIC TYPE): NONE REQUIRED VENTILATION: MAINTAIN ADEQUATE VENTILATION PROTECTIVE GLOVES: RUBBER

EYE PROTECTION: SPLASH PROOF, CHEMICAL RESISTANT SAFETY GOGGLES.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: UNIFORM, COVERALLS, LAB COAT. CHEMICAL RESISTANT FOOTWEAR.
WORK/HYGIENIC PRACTICES: PROVIDE EYE BATH AND EMERGENCY SHOWER. LAUNDER SOILED CLOTHING BEFORE RE-USE.

THE INFORMATION CONTAINED HEREIN IS PROVIDED IN GOOD FAITH AND IS BELIEVED TO BE CORRECT AS OF THE DATE HEREOF.
PATTERSON LABORATORIES, INC. MAKES NO REPRESENTATION AS TO THE COMPREHENSIVENESS OR ACCURACY OF THE INFORMATION. IT IS EXPECTED THAT INDIVIDUALS RECEIVING THE INFORMATION WILL EXERCISE THEIR JUDGMENT IN EETERMINING ITS APPROPRIATENESS FOR A PARTICULAR PURPOSE. ACCORDINGLY, WE WILL NOT BE RESPONSIBLE FOR DAMAGES OF ANY KIND RESULTING FROM THE USE OR OF RELIANCE UPON SUCH INFORMATION.

PAGE 3 OF 3 PATTERSON LABORATORIES, INC.

DATE PREPARED: JULY 1, 1997