Product Number: 26550280

Clear Ammonia

MATERIAL SAFETY DATA SHEET

THIS FORM MAY BE USED TO COMPLY WITH OSHA'S HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. TO BE VALID, ALL INFORMATION REQUIRED BY 1910.1200(G) OF THE STANDARD MUST APPEAR ON THIS FORM. CONSULT THE STANDARD FOR SPECIFIC REQUIREMENTS. NOTE: BLANK SPACES ARE NOT PERMITTED, IF ANY ITEM IS NOT APPLICABLE, OR NO INFORMATION IS AVAILABLE, THE SPACE MUST BE MARKED TO INDICATE THAT. _____ IDENTITY (AS USED ON LABEL AND LIST) CLEAR AMMONIA SECTION I MANUFACTURER'S NAME: PATTERSON LABORATORIES, INC. 4940 W. JEFFERSON STREET UNDENTY AZ 25042 EMERGENCY PHONE: 1-602-849-6961 TELEPHONE NUMBER FOR INFORMATION 1-602-269-6251 DATE PREPARED: OCTOBER 2, 1992 PHOENIX, AZ 85043 SECTION II- HAZARDOUS INGREDIENTS/IDENTITY INFORMATION HAZARDOUS COMPONENTS OSHA PEL ACGIH TLV OTHER LIMITS % (SPECIFIC CHEMICAL IDENTITY/ RECOMMENDED OPTIONAL COMMON NAMES 50 PPM 25 PPM NIOSH AMMONIA (AS NH3) 50 PPM SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS _____ BOILING POINT: 191-212 DEGREES FAHRENHEIT SPECIFIC GRAVITY: 0.989 VAPOR PRESSURE (MMHG): N/A MELTING POINT: N/A VAPOR DENSITY(AIR=1): N/A EVAPORATION RATE(BUTYL ACETATE =1 APPEARANCE AND ODOR: CLEAR LIQUID SOLUBILITY IN WATER: COMPLETE WITH DISTINCT AMMONIA ODOR. SECTION IV - FIRE AND EXPLOSION HAZARD DATA FLASH POINT(METHOD USED) NON-FLAMMABLE LEL: 16% UEL: 27% EXTINGUISHED MEDIA: DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY, OR FOAM AS NH3 AS NH3 SPECIAL FIRE FIGHTING PROCEDURES: IF POSSIBLE, MOVE PRODUCT FROM FIRE AREA. COOL FIRE-EXPOSED CONTAINERS WITH WATER SPRAY UNUSUAL FIRE AND EXPLOSION HAZARDS: NEGLIGIBLE FIRE AND EXPLOSION HAZARD. HOWEVER, IF AMMONIA IS EVOLVED, IT IS FLAMMABLE. ~~~~~~~~~~~~~ SECTION V - REACTIVITY DATA STABLE: X CONDITIONS TO AVOID: HEAT INCOMPATIBILITY (MATERIALS TO AVOID) CHLORINE, BROMINE, IODINE, HYPOCHLORITE, MINERAL ACIDS. VIOLENT RECTIONS MAY OCCUR WITH INCOMPATIBLE HAZARDOUS DECOMPOSITION OF BYPRODUCTS: MATERIALS, RELEASING IRRITATING OR TOXIC GASES. HAZARDOUS POLYMERIZATION: WILL NOT OCCUR CONDITIONS TO AVOID: NONE _____ SECTION VI - HEALTH HAZARD DATA ROUTE OF ENTRY: INHALATION: LIKELY SKIN: LIKELY INGESTION: UNLIKELY HEALTH HAZARDS(ACUTE/CHRONIC) (ACUTE)-BASED ON THE TESTING OF THIS PRODUCT IN ANIMALS, IT IS BOTH AN EYE AND SKIN IRRITANT (RABBIT) AND TOXIC BY INGESTION (RAT). (CHRONIC) - NOT DETERMINED ON THIS PRODUCT. CARCINOGENICITY: NTP :N/A IARC MONOGRAPHS: N/A OSHA REGULATED: N/A

NOT DETERMINED FOR HOUSEHOLD AMMONIA OR ITS HAZARDOUS COMPONENT (NH3). SIGNS AND SYMPTOMS OF EXPOSURE: AMMONIA (NH3) IS THE HAZARDOUS INGREDIENT IN THE FINISHED PRODUCT. THE EFFECT DESCRIBED REPRESENT THE "WORST CASE SCENARIO. INHALATION - MILD EXPOSURE TO AMMONIA VAPORS MAY CAUSE IRRITATION OF THE NOSE, THROAT, COUGHING AND SNEEZING. A MORE SEVERE EXPOSURE MAY CUASE RESPIRATORY IRRITATION, BRONCHITIS AND PNEUMONIA. INGESTION - MAY CAUSE EXCESSIVE SALIVATION, NAUSEA, VOMITING, GASTRIC IRRITATION WITH CHANCE OF PERFORATION. INGESTION OF LARGE QUANTITIES MAY PRODUCE CNS DEPRESSION, SHOCK AND CONVULSIONS. SKIN - POWERFUL IRRITANT, MAY CAUSE SEVERE BURNING PAIN AND CORROSIVE DAMAGE, REPEATED OR PROLONGED EXPOSURE MAY CAUSE DERMATITIS. EYES -POWERFUL IRRITANT, MAY CAUSE CONJUNCTIVITIS, SWELLING OR EYELIDS, CHEMICAL BURNS, TRANSIENT CORNEAL DAMAGE, REPEATED OR PROLONGED EXPOSURE MAY CAUSE CATARACTS AND RETINAL ATROPHY. MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE KNOWN EMERGENCY AND FIRST AID PROCEDURES: EYES - IMMEDIATELY FLUSH WITH RUNNING WATER FOR AT LEAST 15 MINUTES. GET PROMPT MEDICAL ATTENTION, SKIN - RINSE WELL WITH RUNNING WATER. IF IRRITATION PERSISTS, CONTACT PHYSICIAN OR LOCAL POISON CONTROL CENTER. INHALATION - REMOVE VICTIM TO FRESH AIR, PROVIDE SYMPTOMATIC AND SUPPORTIVE ACRE. CONTACT PHYSICIAN OR LOCAL POISON CONTROL CENTER. INGESTION - IMMEDIATELY GIVE LARGE QUANTITIES OF WATER OR MILK TO DILUTE. DO NOT INDUCE VOMITING. GET PROMPT MEDICAL ATTENTION. _____ SECTION VII - PRECAUTIONS FOR SAFE HANDLING _____ STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: EYE PROTECTION - AVOID EYE CONTACT. WEAR PROTECTIVE SAFETY GOGGLES OR FACE SHIELD. SKIN PROTECTION - AVOID PROLONGED OR REPEATED SKIN CONTACT. WEAR PROTECTIVE GLOVES. RESPIRATORY PROTECTION - KEEP UPWIND OF SPILL, AVOID BREATHING VAPORS. USE NIOSH APPROVED RESPIRATOR THAT WILL PROVIDE PROTECTION FROM AMMONIA GAS. IF VAPORS >300PPM, USE SCBA W/FULL FACE SHIELD. WASTE DISPOSAL METHOD: DILUTE WITH WATER AND FLUSH TO SEWER IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL ENVIRONMENT REGULATIONS. PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING DO NOT MIX WITH OTHER HOUSEHOLD CHEMICALS, SUCH AS BLEACH, AUTOMATIC TIOLET BOWL CLEANERS, WALL OR TILE CLEANERS. STORE IN COOL, VENTILATED AREA. KEEP OUT OF DIRECT SUNLIGHT. AVOID OVERHEATING, PLACTIC BOTTLE WILL BULGE FROM AMMONIA VAPOR PRESSURE. OTHER PRECAUTIONS: NONE SECTION VIII - CONTROL MEASURES _____ RESPIRATORY PROTECTION: NIOSH APPROVED RESPIRATOR OR BREATHING APPARATUS WITH FACE SHIELD. VENTILATION: LOCAL EXHAUST: XX PROTECTIVE GLOVES: WEAR PROTECTIVE GLOVES. EYE PROTECTION: WEAR SAFETY GOGGLES OR FACE SHIELD. OTHER PROTECTIVE CLOTHING OR EQUIPMENT: UNIFORMS, COVERALLS, OR LABCOATS. WORK/HYGIENIC/MAINTENANCE PRACTICES: PROVIDE EYEBATH AND EMERGENCY SHOWER. LAUNDER WORK CLOTHING WHEN SOILED. _____ THE INFORMATION CONTAINED HEREIN IS PROVIDED IN GOOD FAITH AND IS BELIEVED TO BE CORRECT AS OF THE DATE HEREOF, HOWEVER, PATTERSON LABORATORIES, INC. MAKES NO REPRESENTATION AS TO THE COMPREHENSIVENESS OR ACCURACY OF THE INFORMATION. IT IS EXPECTED THAT THE INDIVIDUALS RECEIVING THE INFORMATION WILL EXERCISE THEIR INDEPENDENT JUDGMENT IN DETERMINING ITS APPROPRIATENESS FOR A PARTICULAR PURPOSE. ACCORDINGLY, PATTERSON LABORATORIES, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES OF ANY KIND RESULTING FROM THE USE OF OR RELIANCE UPON SUCH INFORMATION. OTHER HANDLING AND STORAGE REQUIREMENTS: DO NOT MIX WITH OTHER HOUSEHOLD

CHEMICALS, SUCH AS BLEACH, AUTOMATIC TOILET BOWL CLEANER, WALL OR TILE CLEANERS. STORE IN A COOL VENTILATED AREA. KEEP OUT OF DIRECT SUNLIGHT. AVOID OVER HEATING. PROTECTIVE MEASURES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: PIPELINES MUST BE THOROUGHLY FLUSHED OF AMMONIA BEFORE WELDING OR CUTTING TO AVOID POSSIBLE IGNITION OF TRAPPED AMMONIA VAPORS.

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1 (800) 228-5635 EXTENSION 179