Valid 11/2002 - 01/2003 Fluka Chemie AG Postfach 260 CH-9471 Buchs Switzerland Tel: 081 755 25 11 Fax. 081 756 54 49 Night: 071 228 3600 MATERIAL SAFETY DATA SHEET SECTION 1. - - - - - - - - CHEMICAL IDENTIFICATION- - - - - - - -CATALOG #: 71851 SODIUM PERCHLORATE NAME: SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -CAS #: 7601-89-0 MF: CLNAO4 EC NO: 231-511-9 SYNONYMS NATRIUMPERCHLORAAT (DUTCH) * NATRIUMPERCHLORAT (GERMAN) * PERCHLORATE DE SODIUM (FRENCH) * SODIO (PERCLORATO DI) (ITALIAN) * SODIUM (PERCHLORATE DE) (FRENCH) * SECTION 3. - - - - - - - - HAZARDS IDENTIFICATION - - - -LABEL PRECAUTIONARY STATEMENTS OXIDIZING HARMFUL EXPLOSIVE WHEN MIXED WITH COMBUSTIBLE MATERIAL. HARMFUL IF SWALLOWED. CAUSES CYANOSIS. TARGET ORGAN(S): BLOOD THYROID KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS. DO NOT BREATHE DUST. TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. VERY HYGROSCOPIC IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN. IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN. IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN. IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN. SECTION 5. - - - - - - - FIRE FIGHTING MEASURES - - - - -EXTINGUISHING MEDIA CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM. SPECIAL FIREFIGHTING PROCEDURES WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. UNUSUAL FIRE AND EXPLOSIONS HAZARDS EMITS TOXIC FUMES UNDER FIRE CONDITIONS. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. MAY ACCELERATE COMBUSTION. SECTION 6. - - - - - - ACCIDENTAL RELEASE MEASURES- - - - -ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE. EVACUATE AREA. WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY

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RUBBER GLOVES.
SECTION 7. - - - - -
                       - - - HANDLING AND STORAGE- - - - - - - - - -
    REFER TO SECTION 8.
SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION - - - - -
    DO NOT BREATHE VAPOR.
    DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
    AVOID PROLONGED OR REPEATED EXPOSURE.
   KEEP AWAY FROM COMBUSTIBLE MATERIALS, HEAT, SPARKS, AND OPEN FLAME.
    KEEP TIGHTLY CLOSED.
    STORE IN A COOL DRY PLACE.
    USE ONLY IN A CHEMICAL FUME HOOD.
    SAFETY SHOWER AND EYE BATH.
   NIOSH/MSHA-APPROVED RESPIRATOR.
    COMPATIBLE CHEMICAL-RESISTANT GLOVES.
    CHEMICAL SAFETY GOGGLES.
    WASH THOROUGHLY AFTER HANDLING.
    REMOVE AND WASH CONTAMINATED CLOTHING PROMPTLY.
SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - -
  PHYSICAL PROPERTIES
   MELTING POINT:
                      468 C
    SOLUBILITY:
          WATER -21076
   SPECIFIC GRAVITY: 2.499
SWISS POISON CLASS: 3
SECTION 10. - - - - - - - STABILITY AND REACTIVITY - - - -
  STABILITY
    STABLE.
  INCOMPATIBILITIES
    ORGANIC MATERIALS
    FINELY POWDERED METALS
  HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
    CARBON MONOXIDE, CARBON DIOXIDE
  HAZARDOUS POLYMERIZATION
   WILL NOT OCCUR.
SECTION 11. - - - - - - - TOXICOLOGICAL INFORMATION - - -
  ACUTE EFFECTS
   MAY CAUSE SKIN IRRITATION.
    MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
   MAY CAUSE EYE IRRITATION.
   MAY BE HARMFUL IF INHALED.
   MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER
   RESPIRATORY TRACT.
   MAY BE HARMFUL IF SWALLOWED.
    ABSORPTION INTO THE BODY LEADS TO THE FORMATION OF METHEMOGLOBIN
    WHICH IN SUFFICIENT CONCENTRATION CAUSES CYANOSIS. ONSET MAY BE
   DELAYED 2 TO 4 HOURS OR LONGER.
  CHRONIC EFFECTS
   TARGET ORGAN(S):
    THYROTD
    BLOOD
  RTECS #: SC9800000
   PERCHLORIC ACID, SODIUM SALT
  TOXICITY DATA
    ORL-RAT LD50:2100 MG/KG
                                                  GTPZAB 17(8),33,1973
    IPR-MUS LD50:551 MG/KG
                                                  COREAF 257,791,1963
    ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
    (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
    COMPLETE INFORMATION.
SECTION 12. - - - - - - - - ECOLOGICAL INFORMATION - - - - - - -
    DATA NOT YET AVAILABLE.
SECTION 13. - - - - - - - DISPOSAL CONSIDERATIONS - - - - - - -
    CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF
    THIS MATERIAL.
    OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.
SECTION 14. - - - - - - - - TRANSPORT INFORMATION - - - -
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CONTACT FLUKA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION. SECTION 15. - - - - - - - REGULATORY INFORMATION - - - - -EUROPEAN INFORMATION EC INDEX NO: 017-010-00-6 OXIDIZING HARMFUL R 9 EXPLOSIVE WHEN MIXED WITH COMBUSTIBLE MATERIAL. r 22 HARMFUL IF SWALLOWED. S 13 KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS. S 22 DO NOT BREATHE DUST. S 27 TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. REVIEWS, STANDARDS, AND REGULATIONS OEL=MAK NOHS 1974: HZD A1183; NIS 2; TNF 57; NOS 2; TNE 255 NOES 1983: HZD A1183; NIS 2; TNF 14; NOS 2; TNE 1452; TFE 230 EPA TSCA SECTION 8(B) CHEMICAL INVENTORY SECTION 16. - - - - - - - OTHER INFORMATION- - - - - - - - -THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA, ALDRICH, FLUKA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE. COPYRIGHT 2001 SIGMA-ALDRICH CO. LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY