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 #: 60190 POTASSIUM DICHROMATE, ACS NAME: SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -CAS #: 7778-50-9 MF: CR2K207 EC NO: 231-906-6 SYNONYMS BICHROMATE OF POTASH * DIPOTASSIUM DICHROMATE * IOPEZITE * KALIUMDICHROMAT (GERMAN) * POTASSIUM BICHROMATE * POTASSIUM DICHROMATE * POTASSIUM DICHROMATE(VI) * SECTION 3. - - - - - - - HAZARDS IDENTIFICATION - - - - - - -LABEL PRECAUTIONARY STATEMENTS OXIDIZING HIGHLY TOXIC (USA) VERY TOXIC (EU) CONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE FIRE. VERY TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED. CAUSES BURNS. MAY CAUSE CANCER. MAY CAUSE HERITABLE GENETIC DAMAGE. MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT. TARGET ORGAN(S): LUNGS KIDNEYS CAUSES BURNS. SENSITIZER. WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION. IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE). THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS HAZARDOUS WASTE. AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/ SAFETY DATA SHEETS. SECTION 4. - - - - - - - - FIRST-AID MEASURES- - - - -IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN IMMEDIATELY. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTATEST63LTATHING IS ND IviceGray cs 0 sc (SYNONYM

INCLUDE SELF-CONTAINED BREATHING APPARATUS TO PROTECT AGAINST THE HAZARDOUS EFFECTS OF THE NORMAL PRODUCTS OF COMBUSTION OR OXYGEN DEFICIENCY. UNUSUAL FIRE AND EXPLOSIONS HAZARDS CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. EMITS TOXIC FUMES UNDER FIRE CONDITIONS. SECTION 6. - - - - - - ACCIDENTAL RELEASE MEASURES- - - - - - - -WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES. SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. AVOID RAISING DUST. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE. EVACUATE AREA. SECTION 7. - - - - - - - HANDLING AND STORAGE- - - - - - - - -REFER TO SECTION 8. SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -SAFETY SHOWER AND EYE BATH. USE ONLY IN A CHEMICAL FUME HOOD. WASH CONTAMINATED CLOTHING BEFORE REUSE. WASH THOROUGHLY AFTER HANDLING. DO NOT BREATHE DUST. DO NOT GET IN EYES, ON SKIN, ON CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. NIOSH/MSHA-APPROVED RESPIRATOR. COMPATIBLE CHEMICAL-RESISTANT GLOVES. CHEMICAL SAFETY GOGGLES. KEEP TIGHTLY CLOSED. KEEP AWAY FROM COMBUSTIBLE MATERIALS, HEAT, SPARKS, AND OPEN FLAME. STORE IN A COOL DRY PLACE. SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -APPEARANCE AND ODOR SOLID. PHYSICAL PROPERTIES MELTING POINT: 390 C SOLUBILITY: WATER -Z26104 SPECIFIC GRAVITY: 2.68 PH: 3.5 - 5.0 SWISS POISON CLASS: 4 SECTION 10. - - - - - - - - STABILITY AND REACTIVITY - - - - -STABILITY STABLE. INCOMPATIBILITIES ORGANIC MATERIALS AVOID CONTACT WITH ACID. FINELY POWDERED METALS HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS POTASSIUM OXIDES CHROMIUM (VI) OXIDE HAZARDOUS POLYMERIZATION WILL NOT OCCUR. SECTION 11. - - - - - - - TOXICOLOGICAL INFORMATION - - - - - -ACUTE EFFECTS INHALATION OF DICHROMATE DUSTS CAN CAUSE ULCERATION AND PERFORATION OF THE NASAL SEPTUM. CONTACT WITH BREAKS IN THE SKIN CAN CAUSE ULCERATION (CHROME SORES). OTHER SYMPTOMS OF EXPOSURE INCLUDE EROSION AND DISCOLORATION OF THE TEETH, NEPHRITIS, EPIGASTRIC PAIN (INFLAMMATION AND ULCERATION OF THE GASTROINTESTINAL TRACT). MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT, EYES AND SKIN. INHALATION MAY RESULT IN SPASM, INFLAMMATION AND EDEMA OF THE LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA. SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING, WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA AND VOMITING.

OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS. SECTION 14. - - - - - - - TRANSPORT INFORMATION - - - - -CONTACT FLUKA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION. SECTION 15. - - - - - - REGULATORY INFORMATION - - - - - - - -EUROPEAN INFORMATION EC INDEX NO: 024-002-00-6 OXIDIZING VERY TOXIC r 49 MAY CAUSE CANCER BY INHALATION. R 46 MAY CAUSE HERITABLE GENETIC DAMAGE. R 41 RISK OF SERIOUS DAMAGE TO EYES. R 43 MAY CAUSE SENSITIZATION BY SKIN CONTACT. R 50/53 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT. S 45 IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE). REVIEWS, STANDARDS, AND REGULATIONS OEL=MAK ACGIH TLV-TWA 0.05 MG(CR)/M3 DTLVS* TLV/BEI,1999