MATERIAL SAFETY DATA SHEET

IDENTITY - #197 BANA OIL MOP TREATMENT

SECTION 1

MANUFACTURED BY: ARROW CHEMICAL PRODUCTS, INC.

ADDRESS 2067 ST. ANNE

DETROIT, MI 48216

EMERGENCY TELEPHONE INFOTRAC 1-800-535-5035

TELEPHONE FOR INFORMATION (313) 237-0277

DATE REVISED 7-30-99

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

CAS #: 64741-44-2 ALIPHATIC PETROLEUM DISTILLATES <90%

PEL: 5 MG/M3 TLV: 5 MG/M3.

CAS #: 8052-41-3 ALIPHATIC HYDROCARBONS < 2%

PEL: 100 PPM TLV: 100 ppm

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 390 - 520 DEG F.

VAPOR PRESSURE: < 0.01 mm Hg

VAPOR DENSITY: HEAVIER THAN AIR

SPECIFIC GRAVITY: 0.94

MELTING POINT: NO DATA

EVAPORATION RATE: < .01

(butyl acetate =1)

SOLUBILITY IN WATER: EMULSIFIES

APPEARANCE AND ODOR: LIGHT TRANSPARENT, BANANA ODOR

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 240 - 275 DEG. F.

FLAMMABLE LIMITS: LOWER .9%

EXTINGUISHING MEDIA - REGULAR FOAM OR WATER FOG OR CARBON DIOXIDE OR DRY CHEMICAL

SPECIAL FIRE FIGHTING PROCEDURES - WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES.

UNUSUAL FIRE AND EXPLOSION HAZARDS - NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

SECTION 5 - REACTIVITY DATA

STABILITY: STABLE

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZING AGENTS

HAZARDOUS POLYMERIZATION - WILL NOT OCCUR

SECTION 6 - HEALTH HAZARD DATA

ROUTES OF ENTRY: SKIN

HEALTH HAZARDS (ACUTE AND CHRONIC): ACUTE: EYES - EXPOSURE TO LIQUID OR VAPOR MAY CAUSE MILD EYE IRRITATION. SYMPTOMS MAY INCLUDE STINGING, TEARING, AND REDNESS. SKIN - PROLONGED OR REPEATED CONTACT CAN CAUSE MODERATE IRRITATION, DEFATTING, DERMATITIS. BREATHING - OF MIST CAN CAUSE IRRITATION OF NASAL AND RESPIRATORY PASSAGES. SWALLOWING - CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, AND DIARRHEA, ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

CHRONIC OVEREXPOSURE: THIS PRODUCT CONTAINS A PARAFFINIC PETROLEUM OIL SIMILAR IN NATURE TO THE MINERAL SEAL OIL WHICH EXXON COMPANY REPORTED TO THE EPA UNDER SECTION 8(E) OF THE TOXIC SUBSTANCE CONTROL ACT. THE REPORT WAS SUBMITTED BASED ON AN ONGOING MOUSE SKIN PAINTING STUDY WHICH SHOWED 8 OF AN ORIGINAL 50 ANIMALS DEVELOPED OBSERVABLE SKIN TUMORS.

CARCINOGENICITY: NTP, IARC MONOGRAPHS, OSHA REGULATED? NO

SIGNS AND SYMPTOMS OF EXPOSURE - SEE ABOVE

EMERGENCY AND FIRST AID PROCEDURES:

EYES: FLUSH WITH LARGE AMOUNTS OF WATER, LIFTING UPPER AND LOWER LIDS OCCASIONALLY, GET MEDICAL ATTENTION.

SKIN: THOROUGHLY WASH EXPOSED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. LAUNDER CONTAMINATED CLOTHING BEFORE RE-USE.

SWALLOWING: DO NOT INDUCE VOMITING, KEEP PERSON WARM, QUIET, AND GET MEDICAL ATTENTION. ASPIRATION OF MATERIAL INTO THE LUNGS DUE TO VOMITING CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

INHALATION: IF AFFECTED, REMOVE INDIVIDUAL TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. KEEP PERSON WARM, QUIET AND GET

MEDICAL ATTENTION.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED - ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND TRANSFER TO HOOD.

WASTE DISPOSAL METHOD - IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS

PRECAUTIONS FOR SAFE HANDLING AND USE - CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED, SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERVED.

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION - IF WORKPLACE EXPOSURE LIMIT(S) OF PRODUCT OR ANY COMPONENT IS EXCEEDED (SEE SECTION 2), A NIOSH.MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH./MSHA RESPIRATORS (NEGATIVE PRESSURE TYPE-UNDER SPECIFIED CONDITIONS. ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

VENTILATION - PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) TO MAINTAIN EXPOSURE BELOW TLV(S).

PROTECTIVE GLOVES - WEAR RESISTANT GLOVES SUCH AS:, POLYETHYLENE

EYE PROTECTION - CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED; HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES. CONSULT YOUR SAFETY REPRESENTATIVE.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT - TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

D.O.T. SHIPPING INFORMATION - NO SPECIAL SHIPPING INFORMATION REQUIRED.

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