Helena Chemical Company 08-MAY-2000 15:27:00 PH: 901-761-0050 Page 1 Of 5 CHEMTREC: 800-424-9300 Material Safety Data Sheet Effective Date: 15-DEC-1997 Product: RATTLER\* HERBICIDE \_\_\_\_\_ I. IDENTIFICATION \_\_\_\_\_ Chemical Name: GLYPHOSATE, ISOPROPYLAMINE SALT Chemical Family: HERBICIDES Formula: NOT APPLICABLE, FORMULATED MIXTURE. Synonyms: NONE CAS Number: (ACTIVE INGREDIENT) 1071-83-6 EPA Number: 524-445-5905 \_\_\_\_\_ II. PHYSICAL DATA \_\_\_\_\_ Boiling Point: NOT ESTABLISHED Freezing Point: 10 DEGREES F. Spec Gravity: 1.170 GMS/CC Vapor Pressure: NOT ESTABLISHED Vapor Density: NOT ESTABLISHED Solubility: 100% Volatiles: NOT ESTABLISHED Evaporation: NOT ESTABLISHED Melting Point: NOT APPLICABLE Appearance: AMBER COLORED SOLUTION, AMINE ODOR. \_\_\_\_\_ III. INGREDIENTS \_\_\_\_\_ CAS Number Percent TLV Hazard Material \_\_\_\_\_ ----- ----- ------ ------41.00 NOT GLYPHOSATE (N-PHOPHONOMETHYL-MILD SKIN & GLYCINE, IN THE FORM OF ITS ESTABLISHED EYE IRRITANT ISOPROPYLAMINE SALT) (CONTAINS 4 LBS PER GALLON OF THE ACTIVE INGREDIENT, GLYPHOSATE) INERT INGREDIENTS 59.00 NOT NOT APPLICABLE APPLICABLE \_\_\_\_\_ IV. FIRE AND EXPLOSION HAZARD \_\_\_\_\_ Flash Point: >200 DEGREES F (TCC) Autoignition Temp: 650 DEG F (ESTIMATE) Flammable Limit: NOT ESTABLISHED Extinguishing Media: WATER SPRAY, FOAM, DRY CHEMICAL OR CARBON DIOXIDE OR ANY CLASS B EXTINGUISHING AGENT. Special Fire Fight Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. EQUIPMENT SHOULD BE THOROUGHLY CLEANED AFTER USE. Fire and Expl Hazard: NONE CURRENTLY KNOWN.

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\_\_\_\_\_ V. HEALTH HAZARD \_\_\_\_\_ Carcinogen Information: NONE CURRENTLY KNOWN. ACUTE EFFECTS OF OVER EXPOSURE \_\_\_\_\_ \_\_\_\_\_ Swallowing: PRACTICALLY NON-TOXIC; ACUTE ORAL LD50 (MOUSE) = >5,000 MG/KG.Skin Absorption: PRACTICALLY NON-TOXIC; ACUTE DERMAL LD50 (RABBIT) = >5,000 MG/KG.Inhalation: SLIGHTLY TOXIC; (RAT 4-HR LC50 - >3.18 MG/L, THE HIGHEST ATMOSPHERIC CONCENTRATION ACHIEVABLE IN THIS STUDY.) Skin contact: SLIGHTLY IRRITATING (RABBIT, 4-HOUR EXPOSURE). NOT CORROSIVE TO SKIN (RABBIT, 4-HOUR EXPOSURE). Eye Contact: NONIRRITATING (RABBIT, 0.0/110.0) Chronic Effects: INGESTION OF RATTLER HERBICIDE HAS BEEN REPORTED TO PRODUCE GASTROINTESTINAL DISCOMFORT WITH IRRITATION OF THE MOUTH, NAUSEA, VOMITING AND DIARRHEA. Other Hazard: NONE CURRENTLY KNOWN. EMERGENCY AND FIRST AID PROCEDURES \_\_\_\_\_ Swallowing: THIS PRODUCT WILL PRODUCE GASTROINTESTINAL IRRITATION. IMMEDIATELY DILUTE BY SWALLOWING WATER OR MILK. OBTAIN MEDICAL ATTENTION. Skin: WASH SKIN THOROUGHLY WITH SOAP AND WATER. IF IRRITATION DEVELOPS. CONSULT A PHYSICIAN. LAUNDER CLOTHING BEFORE REUSE. Inhalation: MOVE TO FRESH AIR IF IRRITATION IS NOTED. IF BREATHING DIFFICULTY DEVELOPS, OBTAIN MEDICAL ATTENTION IMMEDIATELY. Eyes: FLUSH EYES WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. IF IRRITATION DEVELOPS, CONSULT A PHYSICIAN. Notes to Physician: IN THE EVENT OF AN ADVERSE RESPONSE, TREATMENT SHOULD BE DIRECTED TOWARD CONTROL OF THE

SYMPTOMS.

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VI. REACTIVITY \_\_\_\_\_ Stability: Stable Conditions to Avoid: EXCESSIVE TEMPERATURES AND OPEN FLAMES. Polymerization: Will Not Occur Conditions to Avoid: NONE CURRENTLY KNOWN. Incompatibility material: THIS PRODUCT SHOULD BE MIXED, STORED OR APPLIED ONLY IN STAINLESS STEEL, FIBERGLASS, PLASTIC OR LINED CONTAINERS. Hazardous Combustion: MAY PRODUCE OXIDES OF CARBON UNDER FIRE CONDITIONS. \_\_\_\_\_ VII. SPILL OR LEAK PROCEDURES \_\_\_\_\_ Spill or Leak Proc: LIQUID SPILLS ON FLOORS SHOULD BE DIKED OR CONTAINED, AND ABSORBED WITH CLAY ABSORBENT. COLLECT CONTAMINATED ABSORBENT, PLACE IN PLASTIC-LINED CONTAINER FOR PROPER DISPOSAL. SCRUB FLOOR WITH A STRONG INDUSTRIAL DETERGENT SOLUTION. Waste Disposal Method: THIS MATERIAL MUST BE DISPOSED OF ACCORDING TO FEDERAL, STATE, OR LOCAL PROCEDURES UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT. \_\_\_\_\_ VIII. SPECIAL PROTECTION INFORMATION \_\_\_\_\_ Respiration: IF SPRAY IS PRESENT, USE NIOSH/MSHA APPROVED RESPIRATORY PROTECTION FOR PESTICIDE VAPOR OR MIST. Ventilation: LOCAL EXHAUST SUFFICIENT Gloves: IMPERVIOUS Eyes: CHEMICAL SPLASH GOGGLES. Other: EYE WASH STATION, IMPERVIOUS APRON AND FOOTWEAR.

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Product: RATTLER\* HERBICIDE \_\_\_\_\_ IX. SPECIAL PRECAUTIONS \_\_\_\_\_ Special precaution: KEEP OUT OF REACH OF CHILDREN. DO NOT STORE WITH FOOD, FEED, OR OTHER MATERIAL TO BE USED OR CONSUMED BY HUMANS OR ANIMALS. DO NOT CONTAMINATE WATER SUPPLIES, LAKES, STREAMS, OR PONDS. DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT REACT WITH SUCH CONTAINERS AND TANKS TO PRODUCE HYDROGEN GAS WHICH MAY FORM A HIGHLY COMBUSTIBLE GAS MIXTURE. THIS GAS MIXTURE COULD FLASH OR EXPLODE, CAUSING SERIOUS PERSONAL INJURY, IF IGNITED BY OPEN FLAME, SPARK OR OTHER IGNITION SOURCE. Other precaution: THIS PRODUCT DOES NOT CONTAIN ANY CHEMICAL SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372. \_\_\_\_\_ X. SHIPPING INFORMATION \_\_\_\_\_ Shipping name: NOT REGULATED BY DOT, IATA, OR IMDG. Hazard Class: NONE Identification No: NONE Labels Required: NONE REQUIRED Placarding: NONE REQUIRED Freight Class: COMPOUND, WEED KILLING LIQUID, NOIBN (NMFC ITEM 50320, CLASS 60) Chemical Name Equivalent R.Q. \_\_\_\_\_ \_\_\_\_\_

NOT APPLICABLE

NOT APPLICABLE

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for your consideration, investigation and verification.