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Report Number: 703 MSDS No. P14079

Van Waters & Rogers Inc.

Material Safety Data Sheet

Effective Date: 06/14/93

FOR EMERGENCY ASSISTANCE CALL CHEMTREC @ 1-800-424-9300

For product info. call Van Waters & Rogers (206) 872-5000

ALLSOP, INC.

4201 Meridian Street Bellingham, WA 98226

ULTREEN 144™

PRODUCT IDENTIFICATION

PRODUCT NAME:

ULTREEN 144™ (Formula 244)

MSDS #:

P14079

DATE ISSUED:

06/93

INGREDIENTS

Glycol Ether

Proprietary Ingredient

Mixed Hydrocarbons

Proprietary Ingredients

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where proprietary ingredient shows, the identity may be made available as provided in this standard.

PHYSICAL DATA (BASED ON INFORMATION FOR SIMILAR MATERIAL)

BOILING POINT:

370° - 490° F

MELTING POINT:

<0° F

VAPOR PRESS:

1mm Hg @ 68° F

VAPOR DENSITY:

Specific Gravity @ 1 ATM = 5.9

SOL. IN WATER:

< 0.1 g/100 ml.

SPECIFIC GRAVITY:

0.762

FREEZING POINT:

Not Available

EVAPORATION RATE:

0.03: (Butyl Acetate - 1)

APPEARANCE:

Clear Liquid

ODOR: VISCOSITY: Hydrocarbon odor

2 CST @ 77° F

FLASH POINT:

144° F

AUTOIGNITION TEMP : ≥ 640° F

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To: John Pexton at #T9,12067783050

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FIRE AND EXPLOSION HAZARD DATA (BASED ON INFORMATION FOR SIMILAR MATERIAL)

FLASH POINT:

144 F

FLAMMABLE LIMITS (Approx.):

LFL: 0.7% UFL:

9.9%

The autoignition temperature of this product is $\geq 640^{\circ}$ F.

EXTINGUISHING MEDIA: Water fog, carbon dioxide, dry chemical, foam. For large scale fires, alcohol resistant foams are preferred if available. General purpose synthetic foams or protein foams may function, but much less effectively.

FIRE AND EXPLOSION HAZARDS: Combustible. Keep unnecessary people away, isolate hazard area and deny unnecessary entry. When using water spray, boil over may occur when the product temperature reaches the boiling point of water (tank type scenarios, not spills). Vapors can form flammable mixtures if slightly heated. Vapors are heavier than air and may travel a considerable distance where they may linger and/or find an ignition source and flash back. Stay upwind; keep out of low areas. Water may not be effective in extinguishing a fire and may spread it, but a water spray can be used to cool exposed containers. Avoid accumulation of water because this product will float on water and may reignite liquid product in the absence of sparks or flame.

FIRE-FIGHTING EQUIPMENT: Wear positive-pressure, self-contained breathing apparatus and full protective equipment.

REACTIVITY DATA

STABILITY:

(CONDITIONS TO AVOID) Stable under normal storage conditions.

INCOMPATIBILITY:

(SPECIFIC MATERIALS TO AVOID) Strong oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion may produce carbon dioxide, carbon monoxide, and water. Unidentified organic compounds may be formed during combustion.

HAZARDOUS POLYMERIZATION:

Will not occur.

ENVIRONMENTAL AND DISPOSAL INFORMATION

ACTION TO TAKE FOR SPILLS: Keep out of sewers, storm drains, surface waters and soil. Vapor explosion hazard indoors, outdoors or in sewers. Remove all possible ignition sources; like cigarettes, flames, pilot lights, electrical sources, etc. Pump up (with appropriate explosion proof equipment) or soak up with sand or other absorbent. Application of vapor suppression foams may be appropriate. Under some conditions of use, application of clay or cellulose based absorbents on spills of this material may result in

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the generation of flammable vapors since there is a heat of absorption and a high surface area. Product has limited solubility in water and will float on the surface.

DISPOSAL METHOD: ++DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER++. For unused or uncontaminated material, the preferred management options are to send to a licensed recycler, reclaimer, or incinerator. The same management options are recommended for used or contaminated material, although additional evaluation is required. (see, for example, 40 CFR. Part 261, "Identification and Listing of Hazardous Waste.") Any disposal practice must be in compliance with federal, state, provincial, and local laws and regulations. Check with appropriate agencies for your location. For additional information, see Section 4 (REACTIVITY DATA) and "REGULATORY INFORMATION".

HEALTH HAZARD DATA

May cause eye irritation or corneal injury.

SKIN CONTACT: Prolonged or repeated exposure may cause skin irritation or dermatitis. Skin contact may aggravate an existing dermatitis condition. Prolonged exposure may result in the material being absorbed in harmful amounts.

The liguid may cause a burning sensation and itchiness at site of contact. Exposure to large amounts may produce anesthetic or narcotic effects.

INGESTION: Small amounts swallowed incidental to normal handling operations are not likely to cause injury, swallowing amounts larger than that may cause injury. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly leading to death.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract. Signs and symptoms of excessive exposure may be central nervous system effects, including headaches, dizziness, anesthesia, drowsiness, unconsciousness, and perhaps death.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Observations in animals include only increased liver size following repeated exposure with one of the components of this product.

TERATOLOGY (BIRTH DEFECTS): Birth defects are unlikely. Exposures having no adverse effects on the mother should have no effect on the fetus.

REPRODUCTIVE EFFECTS: In animal studies, a component of this product has been shown not to interfere with reproduction.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Results of in vitro ('test tube') mutagenicity tests on one component of this product have been negative.

OTHER DATA: Lab animal studies have shown that prolonged and repeated inhalation exposure to similar components to those used in this product caused adverse kidney effects in male rats, but not female rats, male or female mice, or humans under normal use conditions. It is therefore highly unlikely that the kidney effects observed in male rats have significant implications for humans exposed at or below the recommended exposure guideline.

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FIRST AID

EYES: Irrigate with flowing water immediately and continuously for 15 minutes.

Consult medical personnel.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. Wash clothing before reuse. Destroy contaminated shoes.

INGESTION: Induce vomiting if large amounts are ingested. Consult medical personnel.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

HANDLING PRECAUTIONS

EXPOSURE GUIDELINE (S): 300 ppm recommended by manufacturer of the major components of this product.

VENTILATION: Good general ventilation should be sufficient for most conditions. Explosion-proof local exhaust ventilation may be necessary for some operations.

RESPIRATORY PROTECTION: If respiratory irritation is experienced or it is anticipated that exposure guidelines will be exceeded, use a NIOSH-approved air purifying respirator. For emergency conditions, use a NIOSH-approved positive-pressure self-contained breathing apparatus.

SKIN PROTECTION: Use chemical-resistant protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on specific operation. Remove contaminated clothing no later than the end of the work period and clean before reuse.

EYE PROTECTION: Use safety glasses with side shields or chemical goggles.

SPECIAL PRECAUTIONS IN USE: Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors and mists for fumes should be minimized.

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ADDITIONAL INFORMATION

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE. Keep unconfined liquid and vapor away from heat, spark and flames. Will produce flammable vapors above the flash point. Use of non-sparking or explosion proof equipment may be necessary, depending upon type of operation. Keep containers closed when not in use. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld or perform similar operations on or near empty containers. Spills of these organic liquids on hot fibrous insulations may lead to lowering of the autoignition temperature possibly resulting in spontaneous combustion.

HAZARD RATINGS:

NPCA-HMIS: NFPA 704:

Health 2; Flammability 2; Reactivity 0

Health 2; Flammability 2; Reactivity 0

REGULATORY INFORMATION:

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard A delayed health hazard A fire hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

EMERGENCY ASSISTANCE

For Emergency Assistance involving chemicals call - CHEMTREC 1-800-424-9300

NOTICE

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While this information is believed to be accurate, Allsop, Inc. makes no representations

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as to it's accuracy or sufficiency. Conditions of use are beyond Allsop, Inc. control and therefore users are responsible to verify this data under their own operating conditions to determine whether this product is suitable for their particular purposes. Further, users assume all risks of use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to it's use in combination with any other material or in any other process.

*** End of M.S.D.S. ***



ULTREEN 144™ SPECIFICATIONS

SPECIFIC GRAVITY:

0.762

BOILING RANGE:

370°-490° F.

EVAPORATION RATE: 0.03 (n-Butyl Acetate=1)

FLASH POINT:

144° F.