



RHIP 2000 -

Material Safety Data Sheet: ARP 2000

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CHEMTRAC EMERGENCY #: 1-800-424-9300

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I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Rhino Remove #2000
 CAS Registry No.: 96-48-0
 Molecular Formula: C4H6O2

Product Type: Butyrolactone
 CAS Registry Name: 2(3H)-Furanone, Dihydro-
 Molecular Weight: 86

II. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

CAS Registry No.: 96-48-0
 Hazard %: Minimum 99.5

CAS Registry Name: 2(3H)-Furanone, Dihydro-
 Hazard Reference: Severe Eye Irritant

III. HAZARDOUS IDENTIFICATION

Emergency Overview: Clear liquid with mild odor. Causes eye burns.

Oral Toxicity: RAT LD50: 1580 MG/KG

Acute Toxicity

Dermal Toxicity Guinea Pig LD50 > 5000 MG/KG

Inhalation Toxicity: Rat: Short term exposure at room temperature saturation - No effects

Skin Irritation: (Rabbit) Nonirritating

Eye Irritation: (Rabbit) Severe irritant

Sensitizer: No data found

DOT Corrosive: No data found

Primary route(s) of entry: Absorption/Contact

Signs and Symptoms of Exposure

Symptoms of ingestion: If significant quantity ingested, may dull senses.

Symptoms of inhalation: No effects of exposure expected. If misted or at high concentrations, may cause pallor, nausea, anesthetic or narcotic effects.

Symptoms of skin contact: No effects of exposure expected. If significant amount absorbed dermally, may cause anesthetic or narcotic effects.

Symptoms of eye contact: Causes painful stinging or burning of eyes and lids, watering of eyes, conjunctivitis, opaqueness of cornea, possibly leading to loss of sight.

Medical Conditions Aggravated by Exposure: No data found

Other Toxicity

Other Acute Toxicity: No data found

Sub Chronic Inhalation Toxicity: No data found

Sub Chronic Oral Toxicity: 90-day feeding study in rats - no effects at highest dose level (0.8% of diet).

Sub Chronic Miscellaneous Toxicity: No data found

Mutagenicity: No data found

Aquatic Toxicity: (Minnow) 48 hr. LC50: 100-500 MG/L; Aquatic toxicity Rating: 96 hr TLM > 1000 MG/L

Tumorigenicity: IARC 11, 231 (1976): No carcinogenic effects noted in mice (oral, subcutaneous and skin) or rats.

Reproductive Toxicity: Rat teratology; graded doses 10-1000 MG/KG/DAY (days 6-15 of gestation); Maternal and developmental noel: 1000 MG/KG/Day.

IV. FIRST AID MEASURES

First Aid for Ingestion: General precautionary measures suggest inducing vomiting immediately by giving two glasses of water and sticking fingers down throat. Never give anything by mouth to an unconscious person. Call a physician.

First Aid for Inhalation: If symptoms occur, remove to fresh air. If breathing is difficult, call a physician.

First Aid for Skin Contact: Wash skin with soap and water. Call a physician. Wash clothing before using.

First Aid for Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

V. FIREFIGHTING MEASURES

Flash Point: 200°F

Autoignition Temp: 851°F

Flammable Limits: 1.40% - 6.90%

Fire Fighting Media: Water spray, Alcohol foam, Dry chemical, Carbon Dioxide.

Special Fire Fighting Procedures: Firefighters should wear positive pressure, full face, self-contained breathing apparatus. Cool fire-exposed containers with water spray.

Fire/Explosion Hazards: None known

NFPA Hazard Codes - Health/Flammability/Reactivity

3 1 0

HMIS Hazard Codes - Health/Flammability/Reactivity

3 1 0

VI. ACCIDENTAL RELEASE MEASURES

Spill/leak clean-up procedures: Absorb with earth, sand or similar inert material and dispose with solid waste according to federal, state and local regulations. Flush spill area with a water spray. EPA Hazardous Substance Reportable Quantity: Not listed

VII. HANDLING AND STORAGE

Precautionary Measures: Do not get in eyes. Wash thoroughly after handling. At high concentrations, use with adequate ventilation.
 Disposal Method: Dispose of with liquid waste according to federal, state and local regulations.
 RCRA Class: Not regulated

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: At high concentrations, use with adequate ventilation.
 Respiratory Protection: NIOSH-Approved respirator for organic vapor when excess vapor is likely in breathing zone.
 Eye Protection: Chemical Goggles Skin Protection: Impervious Gloves
 Personal Hygiene: Wash thoroughly after handling.
 Protective Measures During Repair/Maintenance of Equipment: Wash equipment thoroughly with steam or warm water until clean. Check for flammables with an 'explosion meter' and also check the oxygen level with an oxygen meter. In all cases, follow good industrial safety practices before entering equipment.
 Exposure Limits: See section II for composition/information on hazardous ingredients.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	204°C	Vapor Pressure:	0.16 mm Hg (at 20°C)
Vapor Density (Air = 1)	3.00	Water Solubility:	Miscible
Melting/Freezing Point:	-44°C	Appearance:	Clear liquid
Specific Grav. (Water = 1)	1.127 - 1.1276 (25°C)	% Volatiles:	Nonvolatile at S.T.P.
Evaporation Rate:	0.03 (Butyl Acetate = 1)	pH of solution:	4.50 (10% solution)
Odor:	Mild	Color (alpha)	Blk: 40 (max); BLO Purf: 20 (max)

X. STABILITY AND REACTIVITY

Stability: Stable	Hazardous Polymerization:	Will not occur
Conditions to avoid: Heat and flames	Incompatible Materials:	Oxidizing agents
Hazardous Decomposition Products: None known		

XI. TRANSPORT INFORMATION

-Domestic Data-

DOT Shipping Name:	Not regulated
DOT Hazard Class:	Not regulated
Hazardous Ingredient(s):	None
UN Number:	None

-Export Data-

Export Shipping Name:	Not regulated
Export Hazard Class:	Not regulated
Hazardous Ingredient(s):	None
UN Number:	None

XII. PREPARATION INFORMATION

Company:	RhinoTech, Inc.
Prepared by:	David Lamps
Title:	Western Director
Phone:	(612) 436-2475
Revision:	June 8, 1996