

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : ARP2000
Product form : Mixture
Product code : NONE

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Adhesive Debonder

1.3. Details of the supplier of the safety data sheet

RhinoTech, Inc.
2955 Lone Oak Circle
Eagan, MN 55121
651.686.5027

1.4. Emergency telephone number

ChemTel, Inc. 800-255-3924, Int'l 813-248-0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

<u>Hazard Code</u>	<u>Hazard Class</u>	<u>Hazard Category</u>
H227	Flammable liquids	4
H304	Aspiration hazard	1
H315	Skin corrosion/irritation	2
H319	Serious eye damage/eye irritation	2A
H335	Specific target organ toxicity, single exposure (Respiratory Tract Irritation)	3
H336	Specific target organ toxicity, single exposure (Narcotic Effect)	3
H360	Reproductive toxicity	1B

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal Word (GHS-US): **Danger**

Hazard Statements (GHS-US):

- H227: Combustible liquid
- H304: May be fatal if swallowed and enters airways
- H315: Causes skin irritation
- H319: Causes serious eye irritation
- H335: May cause respiratory irritation
- H336: May cause drowsiness or dizziness
- H360: May damage fertility or the unborn child

Precautionary statements (GHS-US):

- P201: Obtain special instructions before use
- P202: Do not handle until all safety precautions have been read and understood
- P210: Keep away from heat/sparks/open flames/hot surfaces. -No smoking.
- P261: Avoid breathing dust/fumes/gas/mist/spray

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P264: Wash thoroughly after handling
P271: Use only outdoors or in a well-ventilated area
P280: Wear protective gloves/protective clothing/eye protection/face protection
P281: Use personal protective equipment as required
P312: Call a POISON CENTER or doctor/physician if you feel unwell
P321: Specific treatment (see SECTION 4)
P331: Do NOT induce vomiting
P362: Take off contaminated clothing and wash before reuse
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+352: IF ON SKIN: Wash with soap and water
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+313: IF exposed or concerned: Get medical advice/attention
P332+313: If skin irritation occurs: Get medical advice/attention
P337+313: If eye irritation persists get medical advice/attention
P370+378: In case of fire: Use suitable extinguishing media for extinction (SEE SECTION 5)
P403+233: Store in a well ventilated place. Keep container tightly closed
P403+235: Store in a well ventilated place. Keep cool
P405: Store locked up
P501: Dispose of contents/container in accordance with local, state and federal authorities.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	CAS #	%
1-Methyl-2-pyrrolidinone	872-50-4	40 - 60
Dimethyl Glutarate	1119-40-0	20 - 40
Dimethyl Succinate	106-65-0	5 - 15
Dimethyl Adipate	627-93-0	5 - 15

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing Use artificial respiration and oxygen if needed. Consult a physician.

First-aid measures after skin contact : IF ON SKIN: Immediately rinse with plenty of water (for at least 15 minutes). If irritation persists, seek medical attention.

First-aid measures after eye contact : IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). If irritation persists, seek medical attention.

First-aid measures after ingestion : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Dilute stomach contents by drinking water. If vomiting occurs spontaneously, keep head below hips to prevent breathing vomit into lungs. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Prolonged exposure may cause skin cracking and dermatitis in sensitive individuals. Causes serious eye irritation.

Symptoms/injuries after inhalation : May cause headache, nausea and irritation of respiratory tract.

Symptoms/injuries after skin contact : Causes skin irritation. Slight skin absorption; toxic effects likely by this route.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : May cause gastrointestinal irritation, nausea, vomiting, and diarrhea if swallowed.

Chronic symptoms : No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide. Dry powder. Water spray.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flash Point 199 F (Closed Cup).

Explosion hazard : Product is not explosive.

Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

Firefighting instructions : Do not dispose of fire-fighting water in the environment. Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Approved supplied-air respirator, in case of emergency. Wear suitable protective clothing, gloves and eye or face protection.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Prevent entry to sewers and public waters. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

No additionnel information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks and open flame. Store in cool well ventilated area. Keep container closed when not in use. Use only with adequate ventilation. Wear proper safety equipment including chemically resistant gloves and safety glasses or goggles. Wash thoroughly after handling. Do not breathe mist or vapor. Do not get in eyes. Do not get on skin. Do not swallow.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : heat sources. Keep container tightly closed.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No OSHA and ACGIH PEL's or TLV's for the listed ingredients of this product unless stated below:

1-Methyl-2-pyrrolidinone, CAS# 872-50-4			
OSHA PEL (TWA) ppm - if units not stated	OSHA PEL (STEL) ppm - if units not stated	OSHA PEL (Ceiling) ppm - if units not stated	ACGIH-TLV
50 PPM (WEEL info)	Not Established	Not Established	Not Established

8.2. Exposure controls

Personal protective equipment : Face shield. Gloves. Protective clothing. Protective goggles. Respiratory protection of the dependent type.

Hand protection : Chemical resistant gloves.

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Eye protection	: Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.
Skin and body protection	: Wear long sleeves. Wear suitable protective clothing.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. If handling results in dust, mist, or aerosols, special ventilation may be required to avoid exceeding exposure limits for nuisance or oil mist particles.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear Liquid.
Color	: No data available
Odor	: Solvent.
Odor Threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 199 F (Closed Cup).
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.061 @ 25 °C
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Sparks. Heat. Open flame. Sun Light.

10.5. Incompatible materials

Strong acids, Strong Bases, Strong oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition generates :Carbon oxides, nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Oral LD50: > 2000 mg/kg (rat) Calculated

Dermal LD50: > 2000 mg/kg (rabbit) Calculated

Inhalation LC50: > 5 mg/l (Dust/Mist-rat) Calculated

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Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause skin irritation. Respiratory tract irritation.
Germ cell mutagenicity	: May damage fertility or the unborn child. 1-Methyl-2-pyrrolidinone. CAS# 872-50-4
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Respiratory tract irritation, narcotic effect.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways
Symptoms/injuries after inhalation	: See SECTION 4
Symptoms/injuries after skin contact	: See SECTION 4.
Symptoms/injuries after eye contact	: See SECTION 4
Symptoms/injuries after ingestion	: See SECTION 4.
Chronic symptoms	: No data available.
Notes:	No data available.

SECTION 12: Ecological information

- 12.1. Toxicity**
No Data
- 12.2. Persistence and degradability**
No Data
- 12.3. Bioaccumulative potential**
No Data
- 12.4. Mobility in soil**
No Data
- 12.5. Other adverse effects**
No Data

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods**
Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.
- Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

14.1. UN number, proper shipping name, class and packaging group.:

Domestic Ground Shipments

Proper Shipping Name: Not regulated
Hazard Class: None
ID Number:
Label Requirements: None
Reportable Quantity: None

14.2. Additional information

SECTION 15: Regulatory information

15.1. US Federal regulations

TSCA Inventory: The components of this product are listed.

SARA Section 311/312, Hazard Category (40CFR 370.2): Acute and chronic health, Fire hazard.

SARA Section 313, Toxic Release Reporting (40CFR Part372): 1-Methyl-2-pyrrolidinone. CAS# 872-50-4. 40 – 60% by wt.

SARA Section 302, EHS Emergency Planning (40CFR Part 355): No listed substance known over 1.0%.

SARA Section 304, EHS Release Reporting (40CFR Part 355): No listed substance known over 1.0%.

CERCLA Section 102-103 HS Release Reporting (40 CFR par302-102a): No listed substance known over 1.0%.

15.2. International regulations

No Data

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15.2.2. National regulations

No Data

15.3. US State regulations

California Prop. 65:

Approximate quantities by weight

N-methyl-2-pyrrolidone, CAS#872-50-4 - birth defects or other reproductive harm 40 - 60%

SECTION 16: Other information

Other information :
: None.

NFPA health hazard : 2

NFPA fire hazard : 2

NFPA reactivity : 0

HMIS III Rating

Health : 2

Flammability : 2

Physical : 0

Personal Protection :

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