

**1. Product and company Identification**

Product Name : **APR-500**
Synonyms : Oxazoline functional crosslinking agent
Product Use : Waterborne crosslinker, Waterborne adhesive promoting agents
Supplier : GHEN MATERIALS LLC
Address : 234 10th Street Suite 516 , Jersey City, NJ 07302 USA
General Information : TEL 201-604-6231 FAX 201-604-6266
Emergency Number : TEL 1-800-255-3924(CHEMTEL 24 hours for USA, Canada)

2. Hazardous identification**GHS Classification:**

Health	Environmental	Physical
Serious eye damage/eye irritation-Category 2A-2B Specific target organ systemic toxicity (single exposure)- Category 3 (Narcotic effects)	Not classified	Flammable Liquids- Category 3

GHS Label**Signal Word**

Warning

Hazard Statements

Flammable liquid and vapor
 Causes serious eye irritation
 May cause drowsiness and dizziness

Precautionary Statements

Not applicable

3. Composition / Information on Ingredients

	Chemical name	Wt %	CAS No.
A	Oxazoline-functional copolymer	40	Trade secret
B	1-Methoxy-2-propanol	38	107-98-2
C	Water	22	7732-18-5

4. First Aid Measures**Eye contact**

Flush eyes with plenty of clean water for at least 15 minutes. Get medical attention. Keep enough opening the eyelid while flushing. Wash every corner of eye.

Skin

Wash with soap and water. Get medical attention if the blisters and the inflammation are caused in the skin.

Inhalation

Remove the victim to fresh air immediately. Keep the victim warm and rest. Get immediate medical attention.

Ingestion

Do not induce vomiting. Give the victim one or two glasses of water. Call a physician immediately. Never give



anything by mouth to an unconscious person.

5. Fire Fighting Measures

Suitable extinguishing media:

Use water spray, foam, carbon dioxide, and powder if this product dries up.

NOT suitable extinguishing media: Not applicable

Specific hazards with regard to fire-fighting measure:

This product does not burn by itself because of containing a lot of water.

If this product dries up and in case of fire, this product may liberate toxic gasses (NOx etc)

Specific methods of fire fighting:

Fight fire from windward. Shut off fuel to fire and use extinguishing agents.

Special equipment for the protection of firefighters:

As in any fire, wear self-contained breathing apparatus with full-face piece operated in positive pressure mode and full protective gear.

6: Accidental Release Measures

Personal precautions:

Evacuate personnel from the lee. Evacuate non-essential personnel. Shut off all sources of ignition; No flares, smoking or flames in the area. Wear proper protective equipment.

Environmental precautions:

Do not flush to sewer or waterways. Dike with soil. Cover with a sheet to prevent expanding odor.

Methods for cleaning up:

Absorb spill with inert materials (e.g. dry sand or soil), then place in a waste disposal container. Wash away with plenty of water, and process the drainage appropriately (incineration)

7. Handling and Storage

Handling

Appropriate technical measure:

Avoid contact with eyes, skin and clothing.

Practice good personal hygiene after using this material. Especially before eating, drinking, smoking or using toilet. Use with local exhaust ventilation.

Precautions for safe handling:

Don't leak, overflow, and scatter. Minimize vapor generation and accumulation. Shut off all sources of ignition;

No flares, smoking, or flames in the area. Avoid falling, dropping, shocking and dragging a container.

Storage

Suitable storage conditions:

Do not store in direct sunlight

Keep away from heat and flame. Avoid conditions to freeze. Keep at temperature between -5°C(23°F) and 40°C(104°F)

Keep container tightly closed when in not use.

8. Exposure Controls / Personal Protection

Engineering controls

No special ventilation requirement in s in normal industrial use. Facilities storing or utilizing this substance should be equipped with an eyewash facility and safety shower.

Personal protective equipment (PPE)

Eyes: Wear protective eyeglasses or chemical safety goggles

Skin: Wear appropriate rubber gloves to prevent skin exposure



Clothing: Wear appropriate protective clothing to prevent skin exposure
Respirators: chemical cartridge respirator with organic vapors cartridge.

9. Physical and Chemical Properties

Odor/Appearance	: Pale yellow liquid, characteristic slight odor
Flashpoint	: 45.4 °C (114°F)(Seta closed cup)
Auto ignition Temperature	: 277.5 °C(1-Methoxy-2-propanol)
Boiling Point	: 120°C (1-Methoxy-2-propanol)
Melting Point	: -5 °C
Vapor Pressure	: 1,150 Pa(1-Methoxy-2-propanol)
Vapor Density (Air=1)	: not determined
Explosive limit	: Lower Limit 2.7 Vol% , Upper Limit 11.8 Vol% (1-Methoxy-2-propanol)
Specific Gravity	: 0.92 (g/cm3)
pH Value	: 9 ±1
Solubility in water	: None(This product is water dispersion)
Flammability	: Fire point of liquid greater than 90 °C (ASTM D1310)
Evaporation Rate (Water=1)	: not determined

10. Stability and Reactivity

Stability	: This substance is stable under the normal condition.
Possible hazardous reaction	: This substance is stable under the normal condition.
Conditions to avoid	: This substance is stable under the normal condition.
Materials to avoid	: Not applicable

Hazardous Reactions/Decomposition Products: When burned, it may exit hazardous gas of NOx etc.

11. Toxicological Information**Acute Toxicity Values**

Oral LD₅₀ (Rat) > 2000 mg/kg

Local effects

Skin Corrosion/irritation	: This substance is not irritating and not corrosive to rabbit skin
Serious eye damage/ eye irritation	: Not available
Sensitization	: Not available
Germ cell mutagenicity	: This substance was negative in the Ames Test
Carcinogenicity	: Not available
Reproductive toxicity	: Not available
Chronic toxicity or long-term toxicity	: Not available
Aspiration hazard	: Not available

12. Ecological Information**Ecotoxicity**

Fish : kill fish LC 50 96h > 1,000mg/L

Crustacea	: Not available
Persistence / degradability	: 1-Methoxy-2-propanol is biodegradable
Bioaccumulation	: Not available
Mobility	: Not available
Other adverse effects	: BOD 6,300mg/L, COD 550,000mg/L

13. Disposal Considerations



Dispose of according to State, Local and EPA regulations.

Waste from residues:

Burn in a chemical incinerator equipped with an afterburner and scrubber. Consult an expert on disposal of recovered materials.

Any contaminated packaging:

Do not put other material into the used container and do not use it for other purpose. Treat the contents burned on the above. Wash the inside of the container before dispose

14. Transport Information**US D.O.T. (only by truck transportation)**

This product can be allowed to be classified as a combustible liquid since the flash point is above 38°C(100°F) under Section 173.120(b)(2).

IMDG (Vessel)

UN Number : UN3092
Labels Required : 1-Methoxy-2-propanol (40% solution)
Class : Class 3
Packing Group : III

Additional regulation : This product is subject to U.S. Export Administration Regulation and is classified as EAR 99 thereunder.

Any transportation practice must be in compliance with laws and regulation in local, Federal government.

15. Regulatory Information**U.S. Federal Regulations**

Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory.

SARA 313 Regulated Chemical(s)

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

International Regulations

Canada (CEPA) : Not listed (oxazoline functional polymer), Listed in DSL (1-methoxy-2-propanol)
Japan (ENCS) : 6-1956 (oxazoline functional polymer), Listed (1-methoxy-2-propanol)
EU Status:
REACH registration : 01-0000016736-63 (oxazoline functional polymer), Not listed (emulsifier)

16. Other Information**Hazard Rating**

Health : 1
Flammability : 2
Reactivity : 0

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combination with other substances.

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