



1. Product And Company Identification

Product Name: AS-2121

Synonyms: Cationic homopolymer-aqueous solution; Coagulant

Manufacturer/Supplier:
Applied Specialties, Inc.
33555 Pin Oak Parkway
Avon Lake, OH 44012
USA



certified with a maximum use
for potable water of 50 mg/L.

Customer Service/Non-Emergency Number: 440-933-9442
Emergency Health/Environmental Number: 216-973-6118
Chemtrec : 800-424-9300

2. Hazards Identification

EMERGENCY OVERVIEW

Signal Word: Caution!

Straw Yellow Liquid with slight amine odor;

May cause skin and eye irritation. Prolonged or repeated contact may cause skin irritation.

Spills are very slippery.

Potential Health Effects: Primary Routes of Entry – Skin, Eyes, Inhalation, Ingestion.

HMIS III Rating:

Health: 1 Flammability: 0 Physical Hazards: 0 [0- minimal; 1-slight; 2-moderate; 3-serious; 4-severe]

3. Product Identification

Components	CAS Number	Weight %	Hazardous
Water	7732-18-5	79.5 - 80.75	N
2-Propen-1-aminium, N,N-dimethyl- N-2-propenyl-chloride, homopolymer	26062-79-3	19.25 - 20.5	Y

This material is classified as hazardous under OSHA regulations.



4. First Aid Measures

SKIN CONTACT: Wash/shower with soap and water to remove any chemical from skin. Clothing should be washed before it is reused. Get medical attention if irritation occurs.

EYE CONTACT: Immediately flush the eyes with lukewarm water for at least 15 minutes, lifting the lower and upper lids occasionally until the chemical is removed. Get **MEDICAL** attention immediately if irritation persists.

INHALATION: If a person breathes in large amounts of product mist, move the person to fresh air. If breathing has stopped, perform artificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible.

INGESTION: Do not induce vomiting. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Get medical attention immediately.

5. Fire Fighting Measures

Suitable Extinguishing Media:

Carbon dioxide, dry powder, foam, water spray

Unsuitable Extinguishing Media:

None known

Hazardous Combustion Products:

Carbon & Nitrogen Oxides

Hazards During Fire-fighting:

Standard procedure for chemical fires

Cool fire-exposed containers with water

Spills can cause very slippery floor conditions

Restrict pedestrian & vehicular traffic in area where slip hazard may exist.

Protective Equipment for Fire-fighting:

Wear self contained breathing apparatus and chemical-protective clothing.

6. Accidental Release Measures

Personal Precautions:

Spills are very slippery. Restrict pedestrian & vehicular traffic in area where slip hazard may exist.

Cleanup:

Pick up with inert absorbent material (sand, earth, etc.)

Scoop into marked containers for disposal as chemical waste

Wear suitable protective equipment

Do not release into the environment



NOTE: DO NOT wash or pour AS-2121 into any surface waters or streams or directly into sewers.

7. Handling and Storage

Handling:

General advice: As with all industrial chemicals, use good industrial practices when handling. Avoid eye, skin, and clothing contact. Do not inhale. Do not taste or swallow. Use only with adequate ventilation. Ensure adequate ventilation. Clean up spills promptly.

Storage:

Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid extremes of temperatures

For Industrial Use Only

8. Exposure Controls/Personal Protection

Exposure Guidelines:

Work only in well ventilated areas. Do not breathe vapors or mists.

Personal Protective Equipment:

Respiratory: Wear a NIOAH-certified respirator as necessary.

Eye Protection: Use tightly fitting safety goggles (chemical goggles).

Body Protection: Wear chemical resistant gloves and protective clothing.

General safety & hygiene measures: There are no OSHA or ACGIH exposure guidelines available for component(s) in this product. Eye wash stations and safety showers should be available in the immediate work areas. Select additional protective equipment based upon potential for exposure.

9. Physical & Chemical Properties

Color	straw yellow
Form	liquid
State of Matter	liquid
Odor	slightly amine
Specific Gravity	1.04 ± 0.02
pH value	~ 6
Evaporation Rate	not tested
Flash Point	>100°C
Self Ignition Temperature	not tested
Melting Point	<0°C
Boiling Point	>100°C
Density	~ 1.0 g/cm ³
Vapor Density	not tested
Partitioning coefficient n-octanol/water (log Pow)	not applicable
Viscosity, dynamic	not tested
% Volatiles	not determined
Solubility in water	miscible



Solubility in other solvents not tested

10. Stability and Reactivity

Stability:

Stable

Conditions to avoid:

Avoid temperature extremes, especially frost and freezing conditions

Substances to avoid:

Strong oxidizing agents, (may degrade polymer); Incompatible with aluminum

Possibility of Hazardous Reactions:

No hazardous reactions known

Hazardous decomposition products:

No decomposition expected under normal storage conditions.

11. Toxicology Information

Acute Oral Toxicity: Not determined

Acute Inhalation Toxicity: Not determined

Acute Dermal Toxicity: Not determined

Skin Irritation: Not determined

Eye Irritation: Not determined

Skin Sensitization: Not determined

Sub Acute Toxicity: Not determined

Sub Chronic Toxicity:

Active polymer – a 6 month study with rats at doses of 1000 mg/kg/day showed cellular effects in kidneys and lungs. Both test concentrations also reduced body weight gain. No Effect
Concentration < 1000 mg/kg/day.

Chronic Toxicity: Not determined

Genetic Toxicity: Not determined

Carcinogenicity:

None of the components in this product at concentrations greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Reproductive Toxicity: Not determined

Developmental Toxicity/Teratogenicity: Not determined

12. Ecological Information

Toxicity to Fish:

Menidia beryline/96 h/LC50: >10,000 mg/l (under static conditions)

Oncorhynchus mykiss/96 h/LC50: 18 mg/l (under static conditions in the presence of humic acid)

Toxicity to Invertebrates:

Daphnia Magna/96 h/LC50: 38 mg/l (under static conditions)

Mysidopsis bahia/96 h/LC50: 290 mg/l (under static conditions)



Toxicity to Aquatic Plants:	Not tested
Toxicity to microorganisms:	Not tested
Biodegradation:	Not tested
Biochemical Oxygen Demand (BOD):	Not tested
Chemical Oxygen Demand (COD):	Not tested

13. Disposal Considerations

Waste Disposal:

Dispose in accordance with national, state and local regulations.

RCRA: Not a hazardous waste under RCRA (40CFR 261).

14. Transport Information

U.S. Department of Transportation:

Not classified as a dangerous good under transport regulations by highway or air.

Not classified as a dangerous good under IATA (International Air Transport Association)

Not classified as a dangerous good under IMDG (International Maritime Dangerous Goods Code)

Proper Shipping Name	Resin Compound, Non - Regulated Liquid Polymer
Hazard Class	Not Regulated
Identification Number	NMFC 46030
Label Required	None

15. Regulatory Information

Federal Regulations

SARA Section 311/312 Hazard Communication Standard:

Acute:	Y	Fire:	N
Chronic:	N	Reactivity:	N
		Sudden Release of Pressure:	N

SARA Section 313 Toxic Chemicals List:

This product does not contain any components reportable under Sec 313 (40CFR 372)

OSHA Hazard Category:

This material is classified as hazardous under OSHA regulations.

Toxic Substances Control Act (TSCA) Significant New Use Rule:

This product is not subject to the Significant New Use Rule.

Toxic Substances Control Act (TSCA) Section 5(e) Consent Orders:

This product is not subject to the Section 5(e) Consent Orders



Toxic Substances Control Act (TSCA) Section 5 (f):

This product is not subject to Section 5 (f) 6 (a) rule.

Toxic Substances Control Act (TSCA) 12(b) Export Notification:

No components listed.

Clean Air Act – Hazardous Air Pollutants (HAP):

Chemical	CAS	Notification
Formaldehyde	50-00-0	Listed

Clean Air Act 602 – Ozone Depleting Substances (ODS):

This product neither contains nor was manufactured with a class I or Class II ozone depleting substance, as defined by the US Clear Air Act Section 602.

Clean Water Act – Priority Pollutants (PP):

This product does not contain any priority pollutant listed under the US Clean Water Act Section 307(2)(1) Priority Pollutant List (40 CFR 401.15).

Pennsylvania Right to Know:

This product contains the following component(s) which are subject to the PA Right to Know disclosure requirement.

Chemical	CAS	Notification
Formaldehyde	50-00-0	Listed
Formaldehyde	50-00-0	Special Hazard
Formaldehyde	50-00-0	Environmental Hazard

California Proposition 65 – Chemicals Known to the State to Cause Cancer:

WARNING: This product contains a chemical known to the State of California to cause cancer.

Chemical	CAS	Notification
Formaldehyde	50-00-0	Carcinogenic

International Regulations:

Chemical Weapons Convention:

This product does not contain any component(s) listed under the Chemical Weapons Convention Schedule of Chemicals.

16. Other Information

Disclaimer: The information contained herein is based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied is made with respect to such data or information. The use is responsible for determining whether the product is suitable for its intended conditions of use.

MSDS History:

This is a new MSDS: Revised to ANSI Z400.1-2004.

Section Changes: 3) Product Identification lists all components

End MSDS ID: 102222121-6

Reviewed: 8/10/10 JMJ