



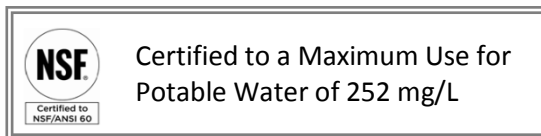
1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: AS-3098

Synonyms: Coagulant Aid

Manufacturer/Supplier:

Applied Specialties, Inc.
33555 Pin Oak Parkway
Avon Lake, OH 44012



Customer Information Number: 440-933-9442

Emergency 24-Hour Health/Environmental Phone: 216-973-6118

2. CHEMICAL COMPOSITION

Component	CAS Number	Exposure TWA/Ceiling
Polyaluminum Hydroxychlorosulfate	39290-78-3	2 mg/m ³ for soluble salts, as Aluminum

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Clear light brown liquid, Halogen odor

WARNING! Respiratory tract burns, skin burns, eye burns, mucous membrane burns

HMIS Rating: Health - 2 Fire - 0 Reactivity - 0

0- Minimal; 1- Slight Hazard; 2- Moderate Hazard;
3- Serious Hazard; 4-Severe Hazard

TARGET ORGANS - Eyes, Skin, Respiratory, Mucous membranes

ROUTES OF ENTRY INTO BODY - Inhalation, Ingestion, Skin absorption, Skin or Eye Contact

SIGNS AND SYMPTOMS OF EXPOSURE - May cause irritation to the respiratory tract, coughing, choking, pain, and possibly burns to the mucous membranes. In some cases may cause pulmonary edema including tightness in the chest, dyspnea, and dizziness. Direct contact may cause irritation, pain, and possibly burns. Swallowing may result in difficult speech, burns to the esophagus and gastrointestinal tract edema of the epiglottis.

OSHA Hazard Communication This material is hazardous according to 29 CFR 1910.1200



4. FIRST AID MEASURES

EYE CONTACT: If material gets into eyes, flush the eyes with large amounts of water for at least 30 minutes, lifting the lower and upper lids occasionally. Get medical attention immediately, preferably from an ophthalmologist. Contact lenses should not be worn when working with this substance or any other chemical. If contact lenses were worn, remove from the eye after the first 5 minutes of flushing.

SKIN CONTACT: Skin that becomes contaminated should be washed or showered for 30 minutes with soap and water to remove any chemical from skin. Get medical attention immediately. Contaminated clothing should be removed and laundered. Clothing that cannot be decontaminated, like leather boots and belts should be disposed of properly.

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 is possible.

INGESTION: If a person swallows this product drink plenty of water. Do not induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN: For inhalation, consider oxygen.
Avoid gastric lavage or emesis.

5. FIRE FIGHTING MEASURES

Flash Point and Method: Not Applicable

EXTINGUISHING MEDIA

This product is a negligible fire hazard. Use agents suitable for surrounding fire such as water in flooding quantities as a fog, carbon dioxide (CO₂), dry chemical extinguishers, or foam.

FIRE FIGHTING MEASURES

Keep upwind. Keep out of low areas. Avoid breathing vapors and fumes from this material. Avoid bodily contact with the material. Move containers from the fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Use extinguishing agents appropriate for the surrounding fire. Apply water from a protected location or from a safe distance. Keep material out of water sources and sewers.

FIRE FIGHTING EQUIPMENT

As in any fire, wear NIOSH/MSHA approved, pressure-demand self-contained breathing apparatus and full protective gear including boots, protective gloves, and gas-tight goggles. Regular Fire Fighter's gear is inadequate.



6. ACCIDENTAL RELEASE MEASURES

Persons not wearing protective equipment and clothing should be restricted from spill areas until clean up has been completed. If AS-3098 is spilled, take the following steps:

1. Ventilate the spill area.
2. For small spills or leaks: Stop the leak if possible without personal risk. Neutralize with alkali such as soda ash, lime, or limestone. Adequate ventilation is mandatory.
3. For larger spills: Dike the area around the spill to prevent spreading, collect in an approved liquid vacuum if possible. For any residual material follow step 2.
4. Discard any vacuumed material and the absorbent material in accordance to all FEDERAL, STATE AND LOCAL REGULATIONS.

NOTE: DO NOT wash or pour AS-3098 into any surface waters or streams or directly into sewers.

7. HANDLING AND STORAGE

HANDLING

Use with adequate ventilation. Avoid breathing mists or aerosols. Wear appropriate protective equipment (See Section 8). Practice good industrial hygiene. Wash thoroughly with soap and water after handling and before eating, drinking, or smoking.

STORAGE

Keep AS-3098 in a cool, dry place. Keep in tightly sealed containers with labels visible. Store between 10°C - 30°C. Keep separated from incompatible substances. Product will slowly corrode iron, brass, copper, aluminum, and mild steel.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Use in areas with adequate ventilation.

PERSONAL PROTECTION

Respirator: Necessary with insufficient or improper engineering controls allow the threshold limit to be exceeded or if sensitivity has developed. Wear a NIOSH approved respirator with dust/mist cartridges. Selection of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Eye Protection: Wear chemical goggles and a face shield

Gloves: Wear rubber or neoprene gloves and check with glove manufacturers' recommendations

Clothing: Normal working clothing is usually adequate, but wear a rubber apron in areas where splashing may occur

Other: Eye wash and safety showers should be in immediate work area, practice good industrial hygiene

Recommendations: ESCAPE & FIRE FIGHTING-Self-contained breathing apparatus with a face-piece operated in pressure demand or other positive-pressure mode.



9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear light brown liquid
ODOR	Halogen
BOILING POINT	110°C (230°F)
FREEZING POINT	< -6.7°C (20°F) <i>Estimated</i>
FLASH POINT	Not applicable
VAPOR PRESSURE	Same as water
VAPOR DENSITY	Same as water
SPECIFIC GRAVITY	1.230 ± 0.025
PRODUCT pH	2.5 ± 1.0
SOLUBILITY IN WATER	100%

10. STABILITY AND REACTIVITY

Stability	Stable under normal temperatures and pressures.
Hazardous Polymerization	Will not occur
Incompatibilities	Alkalis and oxidizing agents. Reacts with zinc and aluminum to form hydrogen gas
Hazardous Decomposition Products	Sodium monoxide

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS

Ingestion:	Ingestion may cause irritation or burns of the mucous membranes, esophagus and stomach. May cause nausea, vomiting and diarrhea. Large amounts may cause liver and kidney effects.
Inhalation	Inhalation of mists may cause irritation of the nose throat and upper respiratory tract.
Eye	May cause moderate to severe irritation with pain and tearing.
Skin	May cause irritation.
Sensitization	This material is not known to cause sensitization.
Chronic	None currently known.
Carcinogenicity	None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.
Mutagenicity	None currently known.

Medical Conditions Aggravated by Exposure: Employees with pre-existing eye, skin and respiratory disease may be at increased risk from exposure.

Acute Toxicity Values:
No data available.



12. ECOLOGICAL INFORMATION

TOXICITY TO AQUATIC INVERTEBRATES

48 hr. EC50 Daphnia magna 20 mg/L

13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL

Prohibition – Do not discharge to sewer

Destruction – Dispose in accordance with federal, state, and local regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262, this product may be RCRA regulated as D002 due to corrosivity

USED PACKAGING

Decontamination – Empty packaging thoroughly rinse with water before disposal

Destruction – Dispose in accordance with federal, state, and local regulations. Various options may be available

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME

Industrial Process Water Treating

HAZARD CLASS

Not DOT Regulated

IDENTIFICATION NUMBER

NMFC 50227 Sub 1 Class 60

PACKAGING GROUP

NA

LABEL REQUIRED

NA

15. REGULATORY INFORMATION

Federal Regulations

OSHA HAZARD COMMUNICATION STANDARD (26 CFR 1910.1200)

Hazardous Non-Hazardous

None of the chemicals in this product are considered highly hazardous by OSHA.

CERCLA/SUPERFUND (40 CFR 117, Section 302)

No components listed

SARA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355)

This product does not contain any chemicals subject to the reporting requirements of 40 CFR 355.

SARA HAZARD CATEGORIES (40 CFR 370, Sections 311, 312)

Acute Chronic Fire Pressure Reactive None

SARA TOXIC SUBSTANCES (40 CFR 372, Section 313)

No components listed



US TOXIC SUBSTANCES CONTROL ACT/INVENTORY STATUS (TSCA)

All components are listed

RCRA STATUS (40 CFR Ch. 1, Subpart C, Section 261)

May be classified as D002 due to corrosivity

NTP, IARC, OSHA, & ACGIH STATUS

None of the components are listed

REPORTABLE QUANTITY (RQ) (49 CFR Subchapter C, Section 172.101, Appendix A)

This material does not have a reportable quantity

State Regulations

NEW JERSEY RIGHT-TO-KNOW INFORMATION:

Component	CAS Number
Polyaluminum Hydroxychlorosulfate	39290-78-3
1,2-Ethanediamine, polymer with (chloromethyl) oxirane and N-methylmethanamine	42751-79-1

CALIFORNIA PROPOSITION 65:

This product does not contain toxic chemical(s) currently on the California list of known carcinogens and reproductive toxins

NONE

Pursuant to the California Safe Drinking Water and Toxic Enforcement Act of 1986 (proposition 65), this information is provided. This law requires that "clear and reasonable warning" be provided to any individual, knowingly or intentionally exposed to any substances identified by the state as being cancer or reproductive hazards unless, it can be shown that the exposure poses "no significant risk". Based on available data, the following chemicals listed by Proposition 65 may be present in this product:

16. OTHER INFORMATION

This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation and verification. Before using any product, read its label carefully and completely.

Revision 3 / Supersedes 10/26/12 / JMJ Revisions: Section12