

SECTION 1) CHEMICAL PRODUCT AND MANUFACTURER'S IDENTIFICATION

Product ID: MBD-19

Product Name: Mixture of Hydroxide form Type 1 Anion and Hydrogen form Cation resin

Revision Date: Jun 04, 2025 **Date Printed:** Oct 23, 2025

Version: 1.0 **Supersedes Date:** N.A.

Manufacturer's Name: ResinTech, Inc.

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Product/Recommended Uses: Water Purification

SECTION 2) HAZARDS IDENTIFICATION

Classification

Eye Irritation - Category 2

Pictograms



Signal Word

Warning

Hazardous Statements - Health

H319 - Causes serious eye irritation

Precautionary Statements - General

- P101 - If medical advice is needed, have product container or label at hand.
- P102 - Keep out of reach of children.
- P103 - Read label before use.

Precautionary Statements - Prevention

- P264 - Wash thoroughly after handling.
- P280 - Wear protective gloves, protective clothing, eye protection/face protection.

Precautionary Statements - Response

- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 - If eye irritation persists: Get medical advice/attention.

Precautionary Statements - Storage

No precautionary statement available.

Precautionary Statements - Disposal

No precautionary statement available.

Hazards Not Otherwise Classified (HNOC)

No data available.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

| CAS | Chemical Name | % By Weight |
|--------------|---|-------------|
| 0007732-18-5 | WATER | 45% - 60% |
| 0069011-20-7 | BENZENE, DIETHENYL-, POLYMER WITH ETHENYLBENZENE AND ETHENYLETHYLBENZENE, SULFONATED | 20% - 27% |
| 0069011-18-3 | BENZENE, DIETHENYL-, POLYMER WITH ETHENYLBENZENE AND ETHENYLETHYLBENZENE, CHLOROMETHYLATED, TRIMETHYLAMINE-QUATERNIZED, HYDROXIDE | 20% - 28% |

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Eye Contact

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Ingestion

Rinse mouth. If you feel unwell/If concerned: Get medical advice/attention.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards Arising from the Chemical

Fire will produce irritating gases.

Precautions for Firefighters

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Equipment

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Protective Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing dust. Avoid contact with skin, eye or clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material and water from clean-up/firefighting from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up

Avoid raising dust. Safely collect powdered material and deposit in sealed containers for disposal. Ventilate and wash area after clean-up is complete

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use. Avoid contact with skin, eye or clothing. Avoid breathing dust. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored All containers must be properly labelled.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

Storage Room Requirements

Store in a cool, dry, well ventilated area, away from sources of ignition and incompatibilities. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear eye protection with side shields or goggles.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

None of the chemicals in Section 3 are regulated under "ACGIH_carcinogen", "ACGIH_Notations", "ACGIH_TLV_Basis", "ACGIHsmg - ACGIH_STEL_(mg/m3)", "ACGIHsppm - ACGIH_STEL_ppm", "ACGIHtmg", "ACGIHtppm", "CAN_AL_Carcinogen", "CAN_AL_Notation", "CAN_ALsmg", "CAN_ALsppm", "CAN_ALtmg", "CAN_ALtppm", "CAN_ONsmg", "CAN_ONsppm", "CAN_ONtmg", "CAN_ONtppm", "CAN_QCVECDmg - CANADA_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE_mg", "CAN_QCVECDppm - CANADA_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE_ppm", "CAN_QCVEMPmg - CANADA_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE_mg", "CAN_QCVEMPppm - CANADA_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE_ppm", "CANsmg", "CANsppm", "CANtmg", "CANtppm", "NIOSH_carcinogen", "nioshsmg", "nioshsppm", "nioshtmg", "nioshtppm", "OSHA", "OSHA_SkinDesignation", "OSHA_Tables_Z1_Z2_Z3", "OSHA_Carcinogen - OSHA Carcinogen", "OSHAsmg", "OSHA_sppm", "OSHA_tmg", "OSHA_tppm"

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--------------------|----------------|
| % HAPS | 0.00000% |
| % Solids by Vol | N/A |
| % Solids By Weight | 0.00000% |
| % VHAPS | 0.00000% |
| % VOC | 0.00000% |
| Density | 0.68900 g/ml |
| Density HAPS | 0.00000 lb/gal |
| Density VHAPS | 0.00000 lb/gal |
| Density VOC | 0.00000 lb/gal |
| Specific Gravity | 0.68900 |

| | |
|---------------------------------|---|
| Flash Point Symbol | N/A |
| Flash Point | N/A |
| Coefficient Water/Oil | N/A |
| Flammability | N/A |
| Water Solubility | Insoluble |
| Viscosity | N/A |
| Appearance | Brown/Black and Amber |
| pH | Acidic or Basic when exchanging ions with water |
| Odor Description | Odorless |
| Upper Explosion Level | N/A |
| Lower Explosion Level | N/A |
| Vapor Pressure | N/A |
| Vapor Density | N/A |
| Freezing Point | N/A |
| Melting Point | N/A |
| High Boiling Point | N/A |
| Low Boiling Point | N/A |
| Auto Ignition Temp | N/A |
| Evaporation Rate | N/A |
| Decomposition Pt | N/A |
| Kinematic Viscosity | N/A |
| Kinematic Viscosity Temperature | N/A |

SECTION 10) STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical Stability

Stable under normal storage and handling conditions.

Conditions To Avoid

Avoid heat, sparks, flame and contact with incompatible materials

Possibility of Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Strong bases, acids, and oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

Aspiration Hazard

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive Toxicity

Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization

Based on available data, the classification criteria are not met.

Serious Eye Damage/Irritation

Causes serious eye irritation

Skin Corrosion/Irritation

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

Chronic Exposure

Based on available data, the classification criteria are not met.

Potential Health Effects - Miscellaneous

Based on available data, the classification criteria are not met.

SECTION 12) ECOLOGICAL INFORMATION

Other Adverse Effects

No data available.

Ecotoxicity

Based on available data, the classification criteria are not met.

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste.

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste.

Waste Disposal

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste.

Waste management should be in full compliance with national, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

SECTION 14) TRANSPORT INFORMATION

| | U.S. DOT Information | IMDG Information | IATA Information |
|--|----------------------|-------------------|-------------------|
| UN Number: | Not Regulated | Not Regulated | Not Regulated |
| UN proper shipping name: | N/A | N/A | N/A |
| Transport Hazard class(es) | Not Applicable | Not Applicable | Not Applicable |
| Packing group | Not Applicable | Not Applicable | Not Applicable |
| Hazardous substance (RQ) | Not Applicable | Not Applicable | Not Applicable |
| Environmental hazards | No Data Available | No Data Available | No Data Available |
| Special precautions for user | No Data Available | No Data Available | No Data Available |
| Transport in bulk according to Annex II of MARPOL and the IBC code | No Data Available | No Data Available | No Data Available |

SECTION 15) REGULATORY INFORMATION

| CAS | Chemical Name | % By Weight | Regulation List |
|--------------|--|-------------|--|
| 0007732-18-5 | WATER | 45% - 60% | DSL - Domestic Substance List, TSCA - Toxic Substances Control Act (TSCA) |
| 0069011-20-7 | BENZENE, DIETHENYL-, POLYMER WITH ETHENYLBENZENE AND ETHENYLETHYLBENZENE, SULFONATED | 20% - 27% | DSL - Domestic Substance List, SARA312, TSCA - Toxic Substances Control Act (TSCA) |

| CAS | Chemical Name | % By Weight | Regulation List |
|--------------|---|-------------|--|
| 0069011-18-3 | BENZENE, DIETHENYL-, POLYMER WITH ETHENYLBENZENE AND ETHENYLETHYLBENZENE, CHLOROMETHYLATED, TRIMETHYLAMINE-QUATERNIZED, HYDROXIDE | 20% - 28% | DSL - Domestic Substance List, SARA312, TSCA - Toxic Substances Control Act (TSCA) |

Product does not contain any chemicals listed under California Proposition 65

SECTION 16) OTHER INFORMATION

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

HMIS

| | |
|---------------------|-----|
| Health | / 1 |
| FLAMMABILITY | 1 |
| Physical Hazard | 0 |
| Personal Protection | B |

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks

Version 1.0:

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Version 1.0

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