

SAFETY DATA SHEET**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**PRODUCT NAME: **FM-9012**

CHEMICAL FAMILY: Liquid Cationic Polyacrylamide

COMPANY IDENTIFICATION:**FIFE WATER SERVICES
105 CHURCH ST.
O'FALLON, MO 63366
TEL: (636) 281-4580
FAX: (636) 281-4490****HMIS CODE**

Health	2
Flammability	1
Reactivity	0

EMERGENCY PHONE NUMBER USA:

1 800 424 9300 (CHEMTREC)**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

Eye irritation; Category 2; Causes serious eye irritation.;

GHS-Labeling

Hazard pictograms

Signal word : **Warning**Hazard statements : **Hazard statements:**
H319 Causes serious eye irritation.Precautionary statements : **Prevention:**
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
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.

Caution - Slippery when wet! Causes eye irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Fife Water Services****In Case of Chemical Emergency, Call Chemtrec: 1-800-424-9300**

Hazardous components

OSHA REGULATED COMPONENTS

Chemical Name	CAS. NO.	Concentration %
Petroleum distillate hydrotreated light	064742-47-8	20.0-24.0 %
Alcohols, C12—16, ethoxylated	68551-12-2	0-2.7 %
Alcohols, C10—16, ethoxylated	68002-97-1	0-2.7 %
Alkyl,(c-12-C-14) Alcohols, ethoxylated>2-10 EO	68439-50-9	0-2.7 %
Citric acid	77-92-9	1.5-3.0%

Components listed above that have a zero minimum and a common maximum range are interchangeably used components based on availability. Only one of these components is contained in the product up to the maximum amount noted.

4. FIRST AID MEASURES

Description of first aid measures

General advice:

Show the safety data sheet to the doctor in attendance.

If inhaled:

If difficulties occur after vapor/aerosol has been inhaled, remove to fresh air and seek medical attention.

If on skin:

Take off contaminated clothing. Wash affected areas thoroughly with soap and water. Seek medical attention.

If in eyes:

Rinse immediately with plenty of water, also under eyelids for at least 15 min.

Ingestion:

If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Fife Water Services

In Case of Chemical Emergency, Call Chemtrec: 1-800-424-9300

Suitable extinguishing media:

Dry powder, foam, water spray.

Unsuitable extinguishing media for safety reasons:

Water jet

Additional information:

If water is used, restrict pedestrian and vehicular traffic in areas where slip hazard may exist.

Hazards during fire-fighting:

Harmful vapors Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire. Spilled product is slippery underfoot. Very slippery when wet.

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions:**

Use personal protective clothing. Keep people away and stay on the upwind side.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

Cleanup:

Spills should be contained, solidified, and placed in suitable containers for disposal.

Further information:

High risk of slipping due to leakage/spillage of product.

7. HANDLING AND STORAGE**Handling****General advice:**

Keep away from sources of ignition -No smoking.

Protection against fire and explosion:

Take precautionary measures against static discharges.

Storage**General advice:**

Keep container tightly closed and dry; store in a cool place.

Storage stability:

Avoid extreme heat. Avoid freezing.

Temperature tolerance

Avoid freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Distillates (petroleum),
Hydrotreated light ACGIH

TWA value 200 mg/m³ Non-aerosol (total hydrocarbon vapor); Application restricted to conditions in which there are negligible aerosol exposures.
Skin Designation Non-aerosol (total hydrocarbon vapor); the substance can be absorbed through the skin.

Personal protective equipment**Respiratory protection:**

Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Tightly fitting safety goggles (chemical goggles) and face shield.

Body protection:

Impermeable protective clothing

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid, emulsion

Odor: hydrocarbon-like

Color: greyish white

pH value: ca 4

Density: 1.0 g/cm³ (20 C)

Solubility in water: limited by viscosity

Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.

10. STABILITY AND REACTIVITY**Conditions to avoid:**

Stable under recommended storage conditions.

Substances to avoid:

Strong oxidizing agents.

Hazardous reactions:

Hazardous polymerization does not occur.

Decomposition products:

Oxides of nitrogen, ammonia, hydrogen chloride, sulphur dioxide, carbon dioxide, carbon monoxide.

Corrosion to metals:

To avoid product degradation and equipment corrosion, do not use on iron, copper or aluminum containers or equipment.

11. TOXICOLOGICAL INFORMATION**Information on toxicological effects****Acute oral toxicity**

Conclusion: The acute toxicological results displayed may not be the results of actual testing of this material but based on a similar tested material.

/>Remarks: estimated
/Rat/5,000 mg/kg/LD50

Acute oral toxicity

Distillates (petroleum), hydrotreated light:

/>/Rat/5,000 mg/kg/LD50

Acute inhalation toxicity

LC50/Rat/4 h/>/20 mg/l/Remarks: estimated

Acute inhalation toxicity

Distillates (petroleum), hydrotreated light:

LC50/Rat/4 h/>/5.2 mg/l

Acute dermal toxicity

LD50/Rabbit/>
/3,160 mg/kg

Remarks: estimated

Acute dermal toxicity

Distillates (petroleum), hydrotreated light:

LD50/Rabbit/>
/2,000 mg/kg

Skin corrosion/irritation

Remarks: The toxicological data has been taken from products of similar composition.
Conclusion: Irritating to skin.

Serious eye damage/eye irritation

Remarks: The toxicological data has been taken from products of similar composition.

Conclusion: No eye irritation

Respiratory or skin sensitisation**Skin sensitisation**

Conclusion: Not sensitizing.

Skin sensitisation

Distillates (petroleum), hydrotreated light:

Conclusion: This substance is not classified as a sensitizer.

Germ cell mutagenicity**Genotoxicity in vitro**

Distillates (petroleum), hydrotreated light:

Conclusion: No known effect.

Genotoxicity in vivo

Distillates (petroleum), hydrotreated light:

Conclusion: not mutagenic

Carcinogenicity**Carcinogenicity**

Distillates (petroleum), hydrotreated light:

Not classified by IARC or NTP.

Reproductive toxicity**Toxicity for reproduction**

Distillates (petroleum), hydrotreated light:

Conclusion: Did not show teratogenic effects in animal experiments.

12. ECOLOGICAL INFORMATION**Ecotoxicity Effects:****Aquatic toxicity****Aquatic toxicity**

The effects on aquatic organisms are due to an external (non-systemic) mode of action and are significantly reduced (by a factor of 7-20) within 30 minutes due to the binding of the product to dissolved organic carbon and inorganic sorbents such as clays and silts. Ecotoxicological information provided is based on a structurally or compositionally similar product

EC50/48 h/Daphnia magna (Water flea)/Immobilization/OECD Test Guideline 202: > 10 - 100 mg/l

Remarks: similar product

IC50/algae/Growth inhibition/OECD Test Guideline 201:

Due to the cationicity of the polymer, test is not appropriate.

Remarks: The effects on aquatic organisms are due to an external (non-systemic) mode of action and are significantly reduced (by a factor of 7-20) within 30 minutes due to the binding of the product to dissolved organic carbon and inorganic sorbents such as clays and silts.

Toxicity to other Organisms:

Remarks: No data available

Persistence and degradability

Biological degradability:

CO2 Evolution Test/OECD Test Guideline 301B:

The polymeric ingredient is not readily biodegradable, but degradable by hydrolysis.

Bioaccumulative potential

Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water: No data available

Mobility in soil

Water solubility: Limited by viscosity.

Surface tension: not determined

13. DISPOSAL CONSIDERATIONS

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. Do not discharge into drains/surface waters/groundwater.

Container disposal:

Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Dispose of in accordance with national, state and local regulations.

RCRA:

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

14. TRANSPORT INFORMATION

Land transport USDOT	Not classified as a dangerous good under transport regulations
Sea transport IMDG	Not classified as a dangerous good under transport regulations
Air transport IATA/ICAO	Not classified as a dangerous good under transport regulations

15. REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture****SARA Title III Section 311 Categories****Immediate (Acute) Health Effects: Yes;****Delayed (Chronic) Health Effects: No;****Fire Hazard: No; Sudden Release Of Pressure Hazard: No;****Reactivity Hazard: No;****SARA 302 Extremely Hazardous Substances**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

None Present ()

SARA 313 - Specific Toxic Chemical Listings

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.

None Present ()

California Proposition 65

Acrylamide (79-06-1) < 0.01 %

Ethylene oxide (75-21-8) < 0.1 PPM

Remarks: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproduction harm.

Other regulations : None.**Notification status**

: All components of this product are included in the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.

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- : All components of this product are included in the United States TSCA Chemical Inventory or are not required to be listed on the United States TSCA Chemical Inventory.
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- : All components of this product are included in the Canada Domestic Substance List (DSL) or are not required to be listed on the Canada Domestic Substance List (DSL).
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- : All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on the Australian Inventory of Chemical

Substances (AICS).

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- : All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.
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- : All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine (PICCS) inventory.
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16. OTHER INFORMATION**HMIS RATING**

Health: 2
Flammability: 1
Reactivity: 0

NFPA HAZARD RATING (National Fire Protection Association)

Fire 1
Health 2
Reactivity: 0
Special -

FIRE: Materials that must be preheated before ignition can occur.

HEALTH: Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

REACTIVITY: Materials that in themselves are normally stable, even under fire exposure conditions.

REASON FOR ISSUE:

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