



BF Refill Kit

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).
Revision Date: 03/11/2021 Date of Issue: 06/21/2016 Version: 2.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: BF Refill Kit

Synonyms: Biofilm Resistant Gel

Rosemount Part Number: 9210416, 9210426

1.2. Intended Use of the Product

Rosemount 3500 Sensor Maintenance

1.3. Name, Address, and Telephone of the Responsible Party

Company

Emerson Automation Solutions | Rosemount

6021 Innovation Blvd.

Shakopee, MN 55379

1-866-347-3427

1.4. Emergency Telephone Number

Emergency Number : ChemTel LLC

(800)255-3924 (North America)

+1 (813)248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Aquatic Acute 2 H401

Aquatic Chronic 3 H412

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

GHS-US/CA Labeling

Hazard Statements (GHS-US/CA) : H401 - Toxic to aquatic life.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-US/CA) : P273 - Avoid release to the environment.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Water	AQUA	(CAS-No.) 7732-18-5	65-85	Not classified
Potassium chloride	Potassium chloride (KCl) / Hydrochloric acid, potassium salt	(CAS-No.) 7447-40-7	10-30	Not classified
Silica, amorphous	Amorphous silica / Silica / Silica, amorphous, fumed / Silica, colloidal / Silicon dioxide / Silicon dioxide, amorphous / Silicon(IV) oxide / Un-crystalline silica / Pigment White 27 / Silicon dioxide (amorphous) / Silicon dioxide amorphous / Silicon(IV)oxide / Fumed silica / SOLUM DIATOMEAE	(CAS-No.) 7631-86-9	3-7	Not classified

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Isopropyl alcohol	2-Hydroxypropane / 2-Propyl alcohol / 2-Propanol / Isopropanol / Propan-2-ol / Propanol, 2- / Isopropyl alcohol	(CAS-No.) 67-63-0	0.1-1	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	Benzyl-C12-16-alkyldimethylammonium chloride / Quaternary ammonium compounds, benzylalkyl(C12-16)dimethyl, chlorides / Benzyl[alkyl(C12-16)]dimethylammonium chloride / Alkyl(C12-16)dimethylbenzylammonium chloride / Alkyl (C12-16) dimethylbenzylammonium chloride / Benzylkonium chloride / Benzyl-C12-16-alkyldimethyl, chlorides / N-Benzyl-N,N-dimethyl-alkyl(C8-20)ammonium, chloride / Alkyl(C12-16)(benzyl)(dimethyl)ammonium chloride / Benzyl-C12-16-alkyldimethyl, chlorides / Alkyl(C12-16)dimethylbenzyl ammonium chloride / Benzyl(C12-16) alkyldimethyl, chlorides / Benzyl-C12-16-alkyldimethyl, chloride / Quaternary ammonium compounds, benzyl C12-16 (even numbered)-alkyldimethyl chlorides	(CAS-No.) 68424-85-1	<0.1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Silver chloride	Silver chloride (AgCl) / Argentum muriaticum / Silver(I) chloride	(CAS-No.) 7783-90-6	<0.1	Met. Corr. 1, H290 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Ethyl alcohol	Methylcarbinol / Ethanol / Alcohol anhydrous / Alcohol / Grain alcohol	(CAS-No.) 64-17-5	<0.1	Flam. Liq. 2, H225 Eye Irrit. 2A, H319
Methanol	Methyl alcohol / Carbinol / Methyl hydroxide / Wood alcohol	(CAS-No.) 67-56-1	<0.1	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapor), H331 STOT SE 1, H370

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%). The actual concentration of ingredient(s) is withheld as a trade secret in accordance with the Hazardous Products Regulations (HPR) SOR/2015-17 and 29 CFR 1910.1200.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

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SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Halogenated compounds and metal oxides. Nitrogen oxides. Potassium oxides.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Rosemount 3500 Sensor Maintenance

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

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For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Isopropyl alcohol (67-63-0)		
USA ACGIH	ACGIH OEL TWA [ppm]	200 ppm
USA ACGIH	ACGIH OEL STEL [ppm]	400 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA ACGIH	BEI (BLV)	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of shift at end of workweek (background, nonspecific)
USA OSHA	OSHA PEL (TWA) [1]	980 mg/m ³
USA OSHA	OSHA PEL (TWA) [2]	400 ppm
USA NIOSH	NIOSH REL (TWA)	980 mg/m ³
USA NIOSH	NIOSH REL TWA [ppm]	400 ppm
USA NIOSH	NIOSH REL (STEL)	1225 mg/m ³
USA NIOSH	NIOSH REL STEL [ppm]	500 ppm
USA IDLH	IDLH [ppm]	2000 ppm (10% LEL)
Alberta	OEL STEL	984 mg/m ³
Alberta	OEL STEL [ppm]	400 ppm
Alberta	OEL TWA	492 mg/m ³
Alberta	OEL TWA [ppm]	200 ppm
British Columbia	OEL STEL [ppm]	400 ppm
British Columbia	OEL TWA [ppm]	200 ppm
Manitoba	OEL STEL [ppm]	400 ppm
Manitoba	OEL TWA [ppm]	200 ppm
New Brunswick	OEL STEL	1230 mg/m ³
New Brunswick	OEL STEL [ppm]	500 ppm
New Brunswick	OEL TWA	983 mg/m ³
New Brunswick	OEL TWA [ppm]	400 ppm
Newfoundland & Labrador	OEL STEL [ppm]	400 ppm
Newfoundland & Labrador	OEL TWA [ppm]	200 ppm
Nova Scotia	OEL STEL [ppm]	400 ppm
Nova Scotia	OEL TWA [ppm]	200 ppm
Nunavut	OEL STEL [ppm]	400 ppm
Nunavut	OEL TWA [ppm]	200 ppm
Northwest Territories	OEL STEL [ppm]	400 ppm
Northwest Territories	OEL TWA [ppm]	200 ppm
Ontario	OEL STEL [ppm]	400 ppm
Ontario	OEL TWA [ppm]	200 ppm
Prince Edward Island	OEL STEL [ppm]	400 ppm
Prince Edward Island	OEL TWA [ppm]	200 ppm
Québec	VECD (OEL STEL)	1230 mg/m ³
Québec	VECD (OEL STEL) [ppm]	500 ppm
Québec	VEMP (OEL TWA)	985 mg/m ³
Québec	VEMP (OEL TWA) [ppm]	400 ppm
Saskatchewan	OEL STEL [ppm]	400 ppm
Saskatchewan	OEL TWA [ppm]	200 ppm
Yukon	OEL STEL	1225 mg/m ³
Yukon	OEL STEL [ppm]	500 ppm
Yukon	OEL TWA	980 mg/m ³
Yukon	OEL TWA [ppm]	400 ppm
Ethyl alcohol (64-17-5)		

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USA ACGIH	ACGIH OEL STEL [ppm]	1000 ppm
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA OSHA	OSHA PEL (TWA) [1]	1900 mg/m ³
USA OSHA	OSHA PEL (TWA) [2]	1000 ppm
USA NIOSH	NIOSH REL (TWA)	1900 mg/m ³
USA NIOSH	NIOSH REL TWA [ppm]	1000 ppm
USA IDLH	IDLH [ppm]	3300 ppm (10% LEL)
Alberta	OEL TWA	1880 mg/m ³
Alberta	OEL TWA [ppm]	1000 ppm
British Columbia	OEL STEL [ppm]	1000 ppm
Manitoba	OEL STEL [ppm]	1000 ppm
New Brunswick	OEL TWA	1880 mg/m ³
New Brunswick	OEL TWA [ppm]	1000 ppm
Newfoundland & Labrador	OEL STEL [ppm]	1000 ppm
Nova Scotia	OEL STEL [ppm]	1000 ppm
Nunavut	OEL STEL [ppm]	1250 ppm
Nunavut	OEL TWA [ppm]	1000 ppm
Northwest Territories	OEL STEL [ppm]	1250 ppm
Northwest Territories	OEL TWA [ppm]	1000 ppm
Ontario	OEL STEL [ppm]	1000 ppm
Prince Edward Island	OEL STEL [ppm]	1000 ppm
Québec	VECD (OEL STEL) [ppm]	1000 ppm
Saskatchewan	OEL STEL [ppm]	1250 ppm
Saskatchewan	OEL TWA [ppm]	1000 ppm
Yukon	OEL STEL	1900 mg/m ³
Yukon	OEL STEL [ppm]	1000 ppm
Yukon	OEL TWA	1900 mg/m ³
Yukon	OEL TWA [ppm]	1000 ppm
Methanol (67-56-1)		
USA ACGIH	ACGIH OEL TWA [ppm]	200 ppm
USA ACGIH	ACGIH OEL STEL [ppm]	250 ppm
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
USA ACGIH	BEI (BLV)	15 mg/l Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific)
USA OSHA	OSHA PEL (TWA) [1]	260 mg/m ³
USA OSHA	OSHA PEL (TWA) [2]	200 ppm
USA NIOSH	NIOSH REL (TWA)	260 mg/m ³
USA NIOSH	NIOSH REL TWA [ppm]	200 ppm
USA NIOSH	NIOSH REL (STEL)	325 mg/m ³
USA NIOSH	NIOSH REL STEL [ppm]	250 ppm
USA IDLH	IDLH [ppm]	6000 ppm
Alberta	OEL STEL	328 mg/m ³
Alberta	OEL STEL [ppm]	250 ppm
Alberta	OEL TWA	262 mg/m ³
Alberta	OEL TWA [ppm]	200 ppm
British Columbia	OEL STEL [ppm]	250 ppm
British Columbia	OEL TWA [ppm]	200 ppm
Manitoba	OEL STEL [ppm]	250 ppm
Manitoba	OEL TWA [ppm]	200 ppm
New Brunswick	OEL STEL	328 mg/m ³
New Brunswick	OEL STEL [ppm]	250 ppm

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New Brunswick	OEL TWA	262 mg/m ³
New Brunswick	OEL TWA [ppm]	200 ppm
Newfoundland & Labrador	OEL STEL [ppm]	250 ppm
Newfoundland & Labrador	OEL TWA [ppm]	200 ppm
Nova Scotia	OEL STEL [ppm]	250 ppm
Nova Scotia	OEL TWA [ppm]	200 ppm
Nunavut	OEL STEL [ppm]	250 ppm
Nunavut	OEL TWA [ppm]	200 ppm
Northwest Territories	OEL STEL [ppm]	250 ppm
Northwest Territories	OEL TWA [ppm]	200 ppm
Ontario	OEL STEL [ppm]	250 ppm
Ontario	OEL TWA [ppm]	200 ppm
Prince Edward Island	OEL STEL [ppm]	250 ppm
Prince Edward Island	OEL TWA [ppm]	200 ppm
Québec	VECD (OEL STEL)	328 mg/m ³
Québec	VECD (OEL STEL) [ppm]	250 ppm
Québec	VEMP (OEL TWA)	262 mg/m ³
Québec	VEMP (OEL TWA) [ppm]	200 ppm
Saskatchewan	OEL STEL [ppm]	250 ppm
Saskatchewan	OEL TWA [ppm]	200 ppm
Yukon	OEL STEL	310 mg/m ³
Yukon	OEL STEL [ppm]	250 ppm
Yukon	OEL TWA	260 mg/m ³
Yukon	OEL TWA [ppm]	200 ppm
Silica, amorphous (7631-86-9)		
USA OSHA	OSHA PEL (TWA) [1]	6 mg/m ³
USA OSHA	OSHA PEL (TWA) [2]	20 mppcf (80mg/m ³ /%SiO ₂)
USA NIOSH	NIOSH REL (TWA)	6 mg/m ³
USA IDLH	IDLH	3000 mg/m ³
Yukon	OEL TWA	300 particle/mL (as measured by Konimeter instrumentation (Silica) 20 mppcf (as measured by Impinger instrumentation (Silica) 2 mg/m ³ (respirable mass (Silica)

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Suitable eye/body wash equipment should be available in the vicinity of any potential exposure.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

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Appearance	: Not available
Odor	: Not available
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available
Relative Density	: Not available
Specific Gravity	: Not available
Solubility	: Not available
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Thermal decomposition may produce: Halogenated compounds. Metal oxides. Nitrogen oxides. Potassium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

- Acute Toxicity (Oral):** Not classified
- Acute Toxicity (Dermal):** Not classified
- Acute Toxicity (Inhalation):** Not classified
- LD50 and LC50 Data:** Not available
- Skin Corrosion/Irritation:** Not classified
- Eye Damage/Irritation:** Not classified
- Respiratory or Skin Sensitization:** Not classified
- Germ Cell Mutagenicity:** Not classified
- Carcinogenicity:** Not classified
- Specific Target Organ Toxicity (Repeated Exposure):** Not classified
- Reproductive Toxicity:** Not classified
- Specific Target Organ Toxicity (Single Exposure):** Not classified
- Aspiration Hazard:** Not classified
- Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.
- Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.
- Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.
- Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.
- Chronic Symptoms:** None expected under normal conditions of use.

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11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Potassium chloride (7447-40-7)	
LD50 Oral Rat	3020 mg/kg (Species: Wistar)
Isopropyl alcohol (67-63-0)	
LD50 Dermal Rabbit	12956 mg/kg (16.4 mL/kg bw)
LC50 Inhalation Rat	72600 mg/m ³ (Exposure time: 4 h)
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)	
LD50 Oral Rat	426 mg/kg
Ethyl alcohol (64-17-5)	
LD50 Oral Rat	10470 mg/kg
LD50 Dermal Rat	20 ml/kg
LC50 Inhalation Rat	124.7 mg/l/4h
Methanol (67-56-1)	
LD50 Dermal Rabbit	15840 mg/kg
LC50 Inhalation Rat	22500 ppm (Exposure time: 8 h)
ATE US/CA (oral)	100.00 mg/kg body weight
ATE US/CA (dermal)	300.00 mg/kg body weight
ATE US/CA (vapors)	3.00 mg/l/4h
Silica, amorphous (7631-86-9)	
LD50 Oral Rat	7900 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg (No deaths)
Isopropyl alcohol (67-63-0)	
IARC Group	3
Silica, amorphous (7631-86-9)	
IARC Group	3

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Potassium chloride (7447-40-7)	
LC50 Fish 1	1060 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 - Crustacea [1]	825 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	750 (750 – 1020) mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Silver chloride (7783-90-6)	
LC50 Fish 1	1.2 µg/l
EC50 - Crustacea [1]	0.22 µg/l
NOEC Chronic Fish	0.000351 mg/l Species: Pimephales promelas; 28 days
Isopropyl alcohol (67-63-0)	
LC50 Fish 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	1000 mg/l (Exposure time: 96 h - Species: Desmodemus subspicatus)
LC50 Fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Other Aquatic Organisms 2	1000 mg/l (Exposure time: 72 h - Species: Desmodemus subspicatus)
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)	
LC50 Fish 1	0.28 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
NOEC Chronic Fish	0.032 mg/l (Exposure time: 34 d - Species: Fathead minnow (Pimephales promelas)
Ethyl alcohol (64-17-5)	
LC50 Fish 1	11200 mg/l
EC50 - Crustacea [1]	9268 – 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)

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LC50 Fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
ErC50 algae	1000 mg/l
NOEC Chronic Crustacea	9.6 mg/l
Methanol (67-56-1)	
LC50 Fish 1	28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	1340 mg/l
LC50 Fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Silica, amorphous (7631-86-9)	
LC50 Fish 1	5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 - Crustacea [1]	7600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia)

12.2. Persistence and Degradability

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Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

BF Refill Kit	
Bioaccumulative Potential	Not established.
Isopropyl alcohol (67-63-0)	
Partition coefficient n-octanol/water (Log Pow)	0.05 (at 25 °C)
Ethyl alcohol (64-17-5)	
Partition coefficient n-octanol/water (Log Pow)	-0.32
Methanol (67-56-1)	
BCF Fish 1	< 10
Partition coefficient n-octanol/water (Log Pow)	-0.77
Silica, amorphous (7631-86-9)	
BCF Fish 1	(no bioaccumulation expected)

12.4. Mobility in Soil Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways. Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

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Potassium chloride (7447-40-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Silver chloride (7783-90-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Isopropyl alcohol (67-63-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1 % (only if manufactured by the strong acid process, no supplier notification)
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	TP - TP - indicates a substance that is the subject of a proposed Section 4 test rule under TSCA.
Ethyl alcohol (64-17-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Methanol (67-56-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %
Silica, amorphous (7631-86-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. US State Regulations

California Proposition 65

 **WARNING:** This product can expose you to Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Methanol (67-56-1)		X		

Isopropyl alcohol (67-63-0)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
Ethyl alcohol (64-17-5)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List
Methanol (67-56-1)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
Silica, amorphous (7631-86-9)
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List

15.3. Canadian Regulations

Water (7732-18-5)
Listed on the Canadian DSL (Domestic Substances List)
Potassium chloride (7447-40-7)
Listed on the Canadian DSL (Domestic Substances List)

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Silver chloride (7783-90-6)
Listed on the Canadian DSL (Domestic Substances List)
Isopropyl alcohol (67-63-0)
Listed on the Canadian DSL (Domestic Substances List)
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)
Listed on the Canadian DSL (Domestic Substances List)
Ethyl alcohol (64-17-5)
Listed on the Canadian DSL (Domestic Substances List)
Methanol (67-56-1)
Listed on the Canadian DSL (Domestic Substances List)
Silica, amorphous (7631-86-9)
Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 03/11/2021

Revision

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:vapor)	Acute toxicity (inhalation:vapor) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapor
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H336	May cause drowsiness or dizziness
H370	Causes damage to organs
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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H412	Harmful to aquatic life with long lasting effects
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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US)