



# Fluid, Fyrite, O2, 21% and 60%; Fluid, Fyrite, O2, 7%

This document replaces Bacharach MSDS reference numbers 0099-0004 and 0099-0005.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 03/10/2015

Version: 1.0

### SECTION 1: IDENTIFICATION

#### Product Identifier

**Product Form:** Mixture

**Product Name:** Fluid, Fyrite, O2, 21% and 60%; Fluid, Fyrite, O2, 7%

#### Intended Use of the Product

**Use of the Substance/Mixture:** Industrial use. For professional use only.

#### Name, Address, and Telephone of the Responsible Party

##### Company

Bacharach, Inc.

621 Hunt Valley Circle

New Kensington, PA 15068

T 724-334-5760

[msdsr@mybacharach.com](mailto:msdsr@mybacharach.com) - <http://www.mybacharach.com>

#### Emergency Telephone Number

800-424-9300 (CHEMTREC)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### Classification (GHS-US)

Met. Corr. 1 H290

Acute Tox. 3 (Oral) H301

Acute Tox. 3 (Dermal) H311

Skin Corr. 1B H314

Eye Dam. 1 H318

Resp. Sens. 1 H334

Skin Sens. 1 H317

Muta. 2 H341

Repr. 2 H361

STOT SE 2 H371

STOT RE 1 H372

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

#### Label Elements

##### GHS-US Labeling

##### Hazard Pictograms (GHS-US)



##### Signal Word (GHS-US)

: Danger

##### Hazard Statements (GHS-US)

- : H290 - May be corrosive to metals
- H301+H311 - Toxic if swallowed or in contact with skin
- H314 - Causes severe skin burns and eye damage
- H317 - May cause an allergic skin reaction
- H318 - Causes serious eye damage
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H341 - Suspected of causing genetic defects
- H361 - Suspected of damaging fertility or the unborn child
- H371 - May cause damage to organs
- H372 - Causes damage to organs through prolonged or repeated exposure
- H400 - Very toxic to aquatic life

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- Precautionary Statements (GHS-US)** :
- H410 - Very toxic to aquatic life with long lasting effects
  - P201 - Obtain special instructions before use.
  - P202 - Do not handle until all safety precautions have been read and understood.
  - P234 - Keep only in original container.
  - P260 - Do not breathe vapors, mist, spray.
  - P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
  - P270 - Do not eat, drink or smoke when using this product.
  - P272 - Contaminated work clothing should not be allowed out of the workplace.
  - P273 - Avoid release to the environment.
  - P280 - Wear protective gloves, protective clothing, eye protection, face protection, respiratory protection.
  - P284 - Wear respiratory protection.
  - P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
  - P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
  - P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
  - P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P308+P313 - If exposed or concerned: Get medical advice/attention.
  - P310 - Immediately call a POISON CENTER or doctor/physician.
  - P312 - Call a POISON CENTER/doctor/physician if you feel unwell.
  - P314 - Get medical advice and attention if you feel unwell.
  - P321 - Specific treatment (see section 4).
  - P330 - If swallowed, rinse mouth.
  - P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
  - P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
  - P361 - Remove/Take off immediately all contaminated clothing.
  - P362+P364 - Take off contaminated clothing and wash it before reuse.
  - P363 - Wash contaminated clothing before reuse.
  - P390 - Absorb spillage to prevent material damage.
  - P391 - Collect spillage.
  - P405 - Store locked up.
  - P406 - Store in corrosive resistant container with a resistant inner liner.
  - P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

### Other Hazards

**Other Hazards Not Contributing to the Classification:** Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes. Corrosive to metals upon prolonged contact. Corrosive vapors. Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath.

**Unknown Acute Toxicity (GHS-US)** Not available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### Substances

#### Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	41.5 - 72.9	Not classified

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Chromium (III) chloride hexahydrate	(CAS No) 10060-12-5	13.45 - 29.1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317 Repr. 2, H361 STOT SE 2, H371 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Zinc	(CAS No) 7440-66-6	7.64 - 16.53	Comb. Dust Water-react. 1, H260 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Hydrogen chloride	(CAS No) 7647-01-0	5.18 - 11.2	Met. Corr. 1, H290 Acute Tox. 3 (Inhalation:gas), H331 Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT SE 3, H335
Mercury chloride (HgCl <sub>2</sub> )	(CAS No) 7487-94-7	0.77 - 1.67	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Skin Corr. 1B, H314 Muta. 2, H341 Repr. 2, H361 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 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. If you feel unwell, seek medical advice.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Get immediate medical advice/attention.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention immediately.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Seek medical attention.

### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Corrosive. Causes burns. Causes serious eye damage. Toxic if swallowed. Toxic in contact with skin. Inhalation may cause allergic respiratory reaction with asthma-like symptoms and difficulty breathing. May cause an allergic skin reaction. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause heritable genetic damage. Causes damage to organs through prolonged or repeated exposure. May cause respiratory irritation.

**Inhalation:** May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Skin Contact:** Corrosive. Causes burns. Causes severe irritation which will progress to chemical burns. Toxic in contact with skin.

**Eye Contact:** Causes serious eye damage. Contact may cause immediate severe irritation progressing quickly to chemical burns.

**Ingestion:** Toxic if swallowed.

**Chronic Symptoms:** Suspected of damaging fertility. Suspected of damaging the unborn child. May cause genetic defects. May cause damage to organs through prolonged or repeated exposure.

### Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

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### SECTION 5: FIRE-FIGHTING MEASURES

#### Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

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

#### 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:** In a fire may produce toxic, corrosive, irritating,.

#### 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:** Oxides of zinc. Hydrogen chloride. Mercury oxides. Chromium oxides. Corrosive vapors. Toxic fumes are released. Carbon oxides (CO, CO<sub>2</sub>).

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

#### Reference to Other Sections

Refer to section 9 for flammability properties.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do NOT breathe (vapors, mist, spray). Do not get in eyes, on skin, or on clothing.

#### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

#### Environmental Precautions

Prevent entry to sewers and public waters.

#### Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Cautiously neutralize spilled liquid.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Cautiously neutralize spilled liquid. Absorb and/or contain spill with inert material, then place in suitable container. Contact competent authorities after a spill.

#### Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

### SECTION 7: HANDLING AND STORAGE

#### Precautions for Safe Handling

**Additional Hazards When Processed:** When heated to decomposition, emits toxic fumes. Corrosive to metals upon prolonged contact. Corrosive vapors are released. Inhalation of fumes may cause metal fume fever.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

#### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

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

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers. Halogenated compounds. and (some) metals. Ammonia. Nitrogen containing compounds, ammonium compounds.

**Storage Area:** Store in a well-ventilated place. Keep cool.

#### Specific End Use(s)

Industrial use. For professional use only.

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### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control Parameters

Hydrogen chloride (7647-01-0)		
USA ACGIH	ACGIH Ceiling (ppm)	2 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	7 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (Ceiling) (ppm)	5 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	7 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (ppm)	5 ppm
USA IDLH	US IDLH (ppm)	50 ppm
Québec	PLAFOND (mg/m <sup>3</sup> )	7.5 mg/m <sup>3</sup>
Québec	PLAFOND (ppm)	5 ppm

#### Exposure Controls

**Appropriate Engineering Controls:** Alarm detectors should be used when toxic gases may be released. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

**Personal Protective Equipment:** Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection. Protective goggles. Face shield.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics. Corrosionproof clothing.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical goggles or face shield.

**Skin and Body Protection:** Not available

**Respiratory Protection:** Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

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

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Blue
Odor	: Not available
Odor Threshold	: Not available
pH	: < 1
Relative Evaporation Rate (butylacetate=1)	: 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 available
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

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<b>Specific Gravity</b>	: Not available
<b>Solubility</b>	: Not available
<b>Partition coefficient: n-octanol/water</b>	: Not available
<b>Viscosity</b>	: Not available
<b>Explosion Data – Sensitivity to Mechanical Impact</b>	: Not expected to present an explosion hazard due to mechanical impact.
<b>Explosion Data – Sensitivity to Static Discharge</b>	: Not expected to present an explosion hazard due to static discharge.

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** In a fire may produce toxic, corrosive, irritating, and reactive gases.

**Chemical Stability:** Stable at standard temperature and pressure.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks. Incompatible materials.

**Incompatible Materials:** strong acids. Strong bases. Strong oxidizers. Metals. Halogenated compounds. Ammonia. Nitrogen containing compounds, ammonium compounds.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). May release flammable gases. Oxides of zinc. Hydrogen chloride. Chlorine. Chromium oxides. Mercury oxides. Corrosive vapors. Toxic vapors.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects - Product

**Acute Toxicity:** Toxic if swallowed. Toxic in contact with skin.

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Causes severe skin burns and eye damage. **pH:** < 1

**Serious Eye Damage/Irritation:** Causes serious eye damage. **pH:** < 1

**Respiratory or Skin Sensitization:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Suspected of causing genetic defects.

**Teratogenicity:** Not available

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Causes damage to organs through prolonged or repeated exposure.

**Reproductive Toxicity:** Suspected of damaging fertility or the unborn child.

**Specific Target Organ Toxicity (Single Exposure):** May cause damage to organs.

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Corrosive. Causes burns. Causes severe irritation which will progress to chemical burns. Toxic in contact with skin.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage. Contact may cause immediate severe irritation progressing quickly to chemical burns.

**Symptoms/Injuries After Ingestion:** Toxic if swallowed.

**Chronic Symptoms:** Suspected of damaging fertility. Suspected of damaging the unborn child. May cause genetic defects. May cause damage to organs through prolonged or repeated exposure.

### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

<b>Chromium (III) chloride hexahydrate (10060-12-5)</b>	
LD50 Oral Rat	1870 mg/kg
<b>Mercury chloride (HgCl<sub>2</sub>) (7487-94-7)</b>	
LD50 Oral Rat	1 mg/kg
<b>Water (7732-18-5)</b>	
LD50 Oral Rat	> 90000 mg/kg

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<b>Hydrogen chloride (7647-01-0)</b>	
LD50 Oral Rat	700 mg/kg
LD50 Dermal Rabbit	> 5010 mg/kg
LC50 Inhalation Rat (ppm)	3124 ppm/1h

  

<b>Mercury chloride (HgCl<sub>2</sub>) (7487-94-7)</b>	
IARC Group	3
National Toxicity Program (NTP) Status	Evidence of Carcinogenicity.

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

**Ecology - General:** Very toxic to aquatic life with long lasting effects.

<b>Mercury chloride (HgCl<sub>2</sub>) (7487-94-7)</b>	
LC50 Fish 1	0.096 - 0.133 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	> 0.012 mg/l (Exposure time: 48 h - Species: Daphnia magna [semi-static])
LC 50 Fish 2	0.4 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [semi-static])
EC50 Daphnia 2	0.0015 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

<b>Zinc (7440-66-6)</b>	
LC50 Fish 1	2.16 - 3.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	0.139 - 0.908 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 Other Aquatic Organisms 1	0.11 - 0.271 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static])
LC 50 Fish 2	0.211 - 0.269 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static])
EC50 Other Aquatic Organisms 2	0.09 - 0.125 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static])

### Persistence and Degradability

<b>Fluid, Fyrite, O2, 21% and 60%; Fluid, Fyrite, O2, 7%</b>	
Persistence and Degradability	May cause long-term adverse effects in the environment.

### Bioaccumulative Potential

<b>Fluid, Fyrite, O2, 21% and 60%; Fluid, Fyrite, O2, 7%</b>	
Bioaccumulative Potential	Not established.

**Mobility in Soil** Not available

### Other Adverse Effects

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Additional Information:** This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 In Accordance with DOT

<b>Proper Shipping Name</b>	: CORROSIVE LIQUIDS, TOXIC, N.O.S. (contains Chromium Chloride and Mercuric Chloride)
<b>Hazard Class</b>	: 8
<b>Identification Number</b>	: UN2922
<b>Label Codes</b>	: 8,6.1
<b>Packing Group</b>	: II
<b>Marine Pollutant</b>	: Marine pollutant
<b>ERG Number</b>	: 154



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### 14.2 In Accordance with IMDG

**Proper Shipping Name** : CORROSIVE LIQUID, TOXIC, N.O.S. (contains Chromium Chloride and Mercuric Chloride)  
**Hazard Class** : 8  
**Identification Number** : UN2922  
**Packing Group** : II  
**Label Codes** : 8,6.1  
**EmS-No. (Fire)** : F-A  
**EmS-No. (Spillage)** : S-B  
**Marine pollutant** : Marine pollutant



### 14.3 In Accordance with IATA

**Proper Shipping Name** : CORROSIVE LIQUID, TOXIC, N.O.S. (contains Chromium Chloride and Mercuric Chloride)  
**Packing Group** : II  
**Identification Number** : UN2922  
**Hazard Class** : 8  
**Label Codes** : 8,6.1  
**ERG Code (IATA)** : 8P



### 14.4 In Accordance with TDG

**Proper Shipping Name** : CORROSIVE LIQUID, TOXIC, N.O.S. (contains Chromium Chloride and Mercuric Chloride)  
**Packing Group** : II  
**Hazard Class** : 8  
**Identification Number** : UN2922  
**Label Codes** : 8,6.1  
**Marine Pollutant (TDG)** : Marine pollutant



## SECTION 15: REGULATORY INFORMATION

### US Federal Regulations

<b>Fluid, Fyrite, O2, 21% and 60%; Fluid, Fyrite, O2, 7%</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard Delayed (chronic) health hazard
<b>Mercury chloride (HgCl2) (7487-94-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 302 (Specific toxic chemical listings)	
<b>SARA Section 302 Threshold Planning Quantity (TPQ)</b>	≤ 10000
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Zinc (7440-66-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
<b>SARA Section 313 - Emission Reporting</b>	1.0 % (dust or fume only)
<b>Hydrogen chloride (7647-01-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 302 (Specific toxic chemical listings) Listed on SARA Section 313 (Specific toxic chemical listings)	
<b>SARA Section 302 Threshold Planning Quantity (TPQ)</b>	500 (gas only)
<b>SARA Section 313 - Emission Reporting</b>	1.0 % (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

### US State Regulations



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### Mercury chloride (HgCl<sub>2</sub>) (7487-94-7)

U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic  
U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)  
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Right To Know List  
U.S. - Massachusetts - Toxics Use Reduction Act  
U.S. - Minnesota - Chemicals of High Concern  
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances  
U.S. - New Jersey - Environmental Hazardous Substances List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New Jersey - Special Health Hazards Substances List  
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances  
U.S. - Ohio - Extremely Hazardous Substances - Threshold Quantities  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
U.S. - Pennsylvania - RTK (Right to Know) List

### Zinc (7440-66-6)

U.S. - California - Priority Toxic Pollutants - Freshwater Criteria  
U.S. - California - Priority Toxic Pollutants - Saltwater Criteria  
U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)  
U.S. - Colorado - Primary Drinking Water Regulations - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Connecticut - Water Quality Standards - Acute Freshwater Aquatic Life Criteria  
U.S. - Connecticut - Water Quality Standards - Acute Saltwater Aquatic Life Criteria  
U.S. - Connecticut - Water Quality Standards - Chronic Freshwater Aquatic Life Criteria  
U.S. - Connecticut - Water Quality Standards - Chronic Saltwater Aquatic Life Criteria  
U.S. - Connecticut - Water Quality Standards - Consumption of Organisms Only  
U.S. - Connecticut - Water Quality Standards - Consumption of Water and Organisms  
U.S. - Connecticut - Water Quality Standards - Health Designations  
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities  
U.S. - Florida - Drinking Water Standards - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Georgia - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)  
U.S. - Louisiana - Reportable Quantity List for Pollutants  
U.S. - Maryland - Surface Water Quality Standards - Acute Freshwater Aquatic Life  
U.S. - Maryland - Surface Water Quality Standards - Acute Saltwater Aquatic Life Criteria  
U.S. - Maryland - Surface Water Quality Standards - Chronic Freshwater Aquatic Life  
U.S. - Maryland - Surface Water Quality Standards - Chronic Saltwater Aquatic Life Criteria  
U.S. - Maryland - Surface Water Quality Standards - Consumption of Organisms Only  
U.S. - Maryland - Surface Water Quality Standards - Consumption of Water and Organisms  
U.S. - Massachusetts - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Right To Know List  
U.S. - Massachusetts - Toxics Use Reduction Act  
U.S. - Michigan - Polluting Materials List

# Fluid, Fyrite, O2, 21% and 60%; Fluid, Fyrite, O2, 7%

This document replaces Bacharach MSDS reference numbers 0099-0004 and 0099-0005.

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U.S. - Minnesota - Chemicals of High Concern  
U.S. - Minnesota - Groundwater Health Risk Limits  
U.S. - Missouri - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Nevada - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - New Hampshire - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual  
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances  
U.S. - New Jersey - Environmental Hazardous Substances List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New Jersey - Secondary Drinking Water Standards - Recommended Upper Limits (RULs)  
U.S. - New Jersey - Special Health Hazards Substances List  
U.S. - New Jersey - Water Quality - Ground Water Quality Criteria  
U.S. - New Jersey - Water Quality - Practical Quantitation Levels (PQLs)  
U.S. - New Mexico - Water Quality - Standards for Ground Water of 10,000 mg/L TDS Concentration or Less  
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances  
U.S. - North Dakota - Water Quality Standards - Aquatic Life Acute Value for Classes I, IA, II, III  
U.S. - North Dakota - Water Quality Standards - Aquatic Life Chronic Value for Classes I, IA, II, III  
U.S. - North Dakota - Water Quality Standards - Human Health Value for Class III  
U.S. - North Dakota - Water Quality Standards - Human Health Value for Classes I, IA, II  
U.S. - Pennsylvania - Beneficial Use of Sewage Sludge by Land Application - Pollutant Ceiling Limits  
U.S. - Pennsylvania - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - 24-Hour  
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - Annual  
U.S. - Rhode Island - Water Quality Standards - Acute Freshwater Aquatic Life Criteria  
U.S. - Rhode Island - Water Quality Standards - Acute Saltwater Aquatic Life Criteria  
U.S. - Rhode Island - Water Quality Standards - Chronic Freshwater Aquatic Life Criteria  
U.S. - Rhode Island - Water Quality Standards - Chronic Saltwater Aquatic Life Criteria  
U.S. - Rhode Island - Water Quality Standards - Human Health Criteria for Consumption of Aquatic Organisms Only  
U.S. - Rhode Island - Water Quality Standards - Human Health Criteria for Consumption of Water and Aquatic Organisms  
U.S. - South Carolina - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Texas - Drinking Water Standards - Secondary Constituent Levels (SCLs)  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Utah - Drinking Water - Secondary Maximum Contaminant Levels (SMCLs)  
U.S. - Virginia - Water Quality Standards - Acute Freshwater Aquatic Life  
U.S. - Virginia - Water Quality Standards - Acute Saltwater Aquatic Life  
U.S. - Virginia - Water Quality Standards - Chronic Freshwater Aquatic Life  
U.S. - Virginia - Water Quality Standards - Chronic Saltwater Aquatic Life  
U.S. - Virginia - Water Quality Standards - Public Water Supply Effluent Limits  
U.S. - Virginia - Water Quality Standards - Surface Waters Not Used for the Public Water Supply Effluent Limits  
U.S. - Alaska - Water Quality Standards - Acute Aquatic Life Criteria for Fresh Water  
U.S. - Alaska - Water Quality Standards - Chronic Aquatic Life Criteria for Fresh Water  
U.S. - Alaska - Water Quality Standards - Acute Aquatic Life Criteria for Marine Water  
U.S. - Alaska - Water Quality Standards - Chronic Aquatic Life Criteria for Marine Water  
U.S. - Arkansas - Surface Water Quality Standards - Chronic Aquatic Life Criteria  
U.S. - Arkansas - Surface Water Quality Standards - Acute Aquatic Life Criteria

### Hydrogen chloride (7647-01-0)

U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute

U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic

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U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)  
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)  
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)  
U.S. - Delaware - Accidental Release Prevention Regulations - Sufficient Quantities  
U.S. - Delaware - Accidental Release Prevention Regulations - Threshold Quantities  
U.S. - Delaware - Accidental Release Prevention Regulations - Toxic Endpoints  
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities  
U.S. - Florida - Essential Chemicals List  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)  
U.S. - Idaho - Occupational Exposure Limits - Ceilings  
U.S. - Illinois - Toxic Air Contaminants  
U.S. - Louisiana - Reportable Quantity List for Pollutants  
U.S. - Maine - Air Pollutants - Hazardous Air Pollutants  
U.S. - Massachusetts - Allowable Ambient Limits (AALs)  
U.S. - Massachusetts - Allowable Threshold Concentrations (ATCs)  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Right To Know List  
U.S. - Massachusetts - Threshold Effects Exposure Limits (TELs)  
U.S. - Massachusetts - Toxics Use Reduction Act  
U.S. - Michigan - Occupational Exposure Limits - Ceilings  
U.S. - Michigan - Polluting Materials List  
U.S. - Michigan - Process Safety Management Highly Hazardous Chemicals  
U.S. - Minnesota - Chemicals of High Concern  
U.S. - Minnesota - Hazardous Substance List  
U.S. - Minnesota - Permissible Exposure Limits - Ceilings  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual  
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances  
U.S. - New Jersey - Environmental Hazardous Substances List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New Jersey - Special Health Hazards Substances List  
U.S. - New Jersey - TCPA - Extraordinarily Hazardous Substances (EHS)  
U.S. - New York - Occupational Exposure Limits - Ceilings  
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances  
U.S. - North Carolina - Control of Toxic Air Pollutants  
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 1-Hour  
U.S. - Ohio - Accidental Release Prevention - Threshold Quantities  
U.S. - Ohio - Extremely Hazardous Substances - Threshold Quantities  
U.S. - Oregon - Permissible Exposure Limits - Ceilings  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - 1-Hour  
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - Annual  
U.S. - South Carolina - Toxic Air Pollutants - Maximum Allowable Concentrations  
U.S. - South Carolina - Toxic Air Pollutants - Pollutant Categories  
U.S. - Tennessee - Occupational Exposure Limits - Ceilings  
U.S. - Texas - Effects Screening Levels - Long Term

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U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Vermont - Permissible Exposure Limits - Ceilings  
U.S. - Washington - Permissible Exposure Limits - Ceilings  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet  
U.S. - Wyoming - Process Safety Management - Highly Hazardous Chemicals

### Canadian Regulations

#### Fluid, Fyrite, O2, 21% and 60%; Fluid, Fyrite, O2, 7%

WHMIS Classification	Class E - Corrosive Material Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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#### Chromium (III) chloride hexahydrate (10060-12-5)

WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class E - Corrosive Material
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#### Mercury chloride (HgCl2) (7487-94-7)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Listed on the Canadian Ingredient Disclosure List

WHMIS Classification	Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class E - Corrosive Material
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#### Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
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#### Zinc (7440-66-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification	Class B Division 6 - Reactive Flammable Material
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#### Hydrogen chloride (7647-01-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Listed on the Canadian Ingredient Disclosure List

WHMIS Classification	Class A - Compressed Gas Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class E - Corrosive Material
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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

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

**Revision date** : 03/10/2015

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

# Fluid, Fyrite, O2, 21% and 60%; Fluid, Fyrite, O2, 7%

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### GHS Full Text Phrases:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal) Category 1
Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) 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 Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
Muta. 2	Germ cell mutagenicity Category 2
Repr. 2	Reproductive toxicity Category 2
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Sens. 1	Skin sensitization Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 2	Specific target organ toxicity (single exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
Water-react. 1	Substances and mixtures which in contact with water emit flammable gases Category 1
	May form combustible dust concentrations in air
H260	In contact with water releases flammable gases which may ignite spontaneously
H290	May be corrosive to metals
H300	Fatal if swallowed
H301	Toxic if swallowed
H302	Harmful if swallowed
H310	Fatal in contact with skin
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H331	Toxic if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H361	Suspected of damaging fertility or the unborn child
H371	May cause damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

### Party Responsible for the Preparation of This Document

# Fluid, Fyrite, O2, 21% and 60%; Fluid, Fyrite, O2, 7%

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## Safety Data Sheet

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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.*

North America GHS US 2012 & WHMIS