

Safety Data Sheet

This safety data sheet complies with the requirements of: 2012 OSHA Hazard Communication Standard (29CFR 1910.1200)

Product name CHEMGUARD FX EXTREME CLASS A (FXP)

1. Identification

1.1. Product Identifier

Product name CHEMGUARD FX EXTREME CLASS A (FXP)

1.2. Other means of identification

Product code 770180
Synonyms None
Chemical Family No information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use Fire extinguishing agent.
Uses advised against Consumer use.

1.4. Details of the Supplier of the Safety Data Sheet

Company Name Tyco Fire Protection Products
One Stanton Street
Marinette, WI 54143-2542
Telephone: 715-735-7411
Contact point Product Stewardship at 1-715-735-7411
E-mail address psra@tycofp.com

1.5. Emergency Telephone Number

Emergency telephone CHEMTREC 001-800-424-9300 or 001-703-527-3887

2. Hazards Identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation - Category 2
Serious eye damage/eye irritation - Category 1

2.2. Label Elements

Signal Word
DANGER

Hazard Statements
Causes skin irritation
Causes serious eye damage



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

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

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

2.3. Hazards Not Otherwise Classified (HNOC)

Not Applicable.

2.4. Other Information

Toxic to aquatic life with long lasting effects.

3. Composition/information on Ingredients**3.1. Mixture**

The following component(s) in this product are considered hazardous under applicable OSHA(USA)

| Chemical name | CAS No. | weight-% |
|--------------------------|------------|----------|
| Sodium Alkene sulphonate | 68439-57-6 | 10 - 30 |
| n-Butanol | 71-36-3 | 5 - 10 |
| 2-Methyl-2,4-pentanediol | 107-41-5 | 5 - 10 |
| Lauryl Alcohol | 112-53-8 | 1 - 5 |
| 1-Tetradecanol | 112-72-1 | 0.1 - 1 |

4. First aid measures**4.1. Description of first aid measures**

| | |
|-----------------------|---|
| General Advice | Keep victim under observation. Move victim to a safe isolated area. Move victim to fresh air. Remove contaminated clothing and shoes. |
| Eye Contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water. Get medical attention if irritation develops and persists. |
| Inhalation | Remove to fresh air. If breathing is difficult, give oxygen. (Get medical attention immediately if symptoms occur.) |
| Ingestion | Rinse mouth. Do not induce vomiting without medical advice. If swallowed, call a poison control center or physician immediately. |

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms No information available.

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

Note to physicians Treat symptomatically.

5. Fire-fighting measures

5.1. Suitable Extinguishing Media

Product is extinguishing agent. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Unsuitable Extinguishing Media

None.

5.3. Specific Hazards Arising from the Chemical

None known.

Hazardous Combustion Products

Carbon oxides, Nitrogen oxides (NOx), Oxides of sulfur

5.4. Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

5.5. Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal Precautions Ensure adequate ventilation, especially in confined areas.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

7. Handling and Storage**7.1. Precautions for Safe Handling**

Advice on safe handling Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

8. Exposure Controls/Personal Protection**8.1. Control Parameters****Exposure guidelines**

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL |
|--------------------------------------|--|----------|---|---|
| n-Butanol 71-36-3 | TWA: 20 ppm | - | IDLH: 1400 ppm Ceiling: 50 ppm Ceiling: 150 mg/m ³ | 50 ppm (Ceiling) 150 mg/m ³ (Ceiling) |
| 2-Methyl-2,4-pentanediol 107-41-5 | STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction | - | Ceiling: 25 ppm Ceiling: 125 mg/m ³ | 25 ppm (Ceiling) 125 mg/m ³ (Ceiling) |

ACGIH (American Conference of Governmental Industrial Hygienists) OSHA (Occupational Safety and Health Administration of the US Department of Labor) NIOSH IDLH Immediately Dangerous to Life or Health

8.2. Appropriate Engineering Controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

8.3. Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes. Tight sealing safety goggles.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Ventilation Use local exhaust or general dilution ventilation to control exposure with applicable limits

8.4. General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties**9.1. Information on basic physical and chemical properties**

| | | | |
|-----------------------|-------------------|--------------|-------|
| Physical State | Liquid | Color | Amber |
| Odor | Slight solvent | | |
| Odor Threshold | No data available | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--------------------------------------|---------------------|-------------------------|
| pH | 7.0 - 8.5 | |
| Melting point/freezing point | 0 °C / 32 °F | |
| Boiling point / boiling range | > 100 °C / 212 °F | |
| Flash Point | > 100 °C / > 212 °F | |
| Evaporation Rate | No data available | |
| Flammability (solid, gas) | No data available | |
| Flammability limit in air | | |
| Upper flammability limit: | No data available | |
| Lower flammability limit: | No data available | |

| | |
|------------------------------|--------------------|
| Vapor Pressure | No data available |
| Vapor Density | No data available |
| Specific gravity | 1.01 |
| Water Solubility | Completely soluble |
| Solubility in Other Solvents | No data available |
| Partition coefficient | No data available |
| Autoignition Temperature | No data available |
| Decomposition Temperature | No data available |
| Kinematic viscosity | No data available |

10. Stability and Reactivity

10.1. Chemical Stability

Stable under recommended storage conditions.

10.2. Reactivity

No data available

10.3. Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

10.4. Conditions to Avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur.

11. Toxicological Information

11.1. Information on Likely Routes of Exposure

| | |
|---------------------|--------------------|
| Product information | No data available |
| Inhalation | No data available. |
| Eye Contact | No data available. |
| Skin contact | No data available. |
| Ingestion | No data available. |

Acute Toxicity

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|---|---|------------------------|
| Sodium Alkene sulphonate 68439-57-6 | = 2220 mg/kg (Rat) | > 740 mg/kg (Rabbit) | - |
| n-Butanol 71-36-3 | = 700 mg/kg (Rat) = 790 mg/kg (Rat) | = 3402 mg/kg (Rabbit) = 3400 mg/kg (Rabbit) | > 8000 ppm (Rat) 4 h |

| | | | |
|--------------------------------------|-----------------------|-------------------------|-------------------------------------|
| 2-Methyl-2,4-pentanediol 107-41-5 | = 3700 mg/kg (Rat) | = 8560 µL/kg (Rabbit) | > 310 mg/m ³ (Rat) 1 h |
| Lauryl Alcohol 112-53-8 | > 12800 mg/kg (Rat) | - | - |
| 1-Tetradecanol 112-72-1 | > 20 g/kg (Rat) | = 8 g/kg (Rabbit) | - |

11.2. Information on Toxicological Effects

Symptoms No information available.

11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin Corrosion/Irritation Mild Irritant. (rabbit).

Serious eye damage/eye irritation Mild Irritant. (rabbit).

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive Toxicity No information available.

STOT - Single Exposure No information available.

STOT - Repeated Exposure No information available.

Target organ effects Central Nervous System, Eyes, Respiratory System, Skin.

Aspiration Hazard No information available.

11.4. Numerical Measures of Toxicity - Product information

The following values are calculated based on chapter 3.1 of the GHS document mg/kg mg/l

12. Ecological Information**12.1. Ecotoxicity**

Toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|--|--|---|---|
| Sodium Alkene sulphonate 68439-57-6 | - | LC50 (96h) semi-static = 12.2 mg/L Brachydanio rerio LC50 (96h) static 1.0 - 10.0 mg/L Brachydanio rerio | - |
| n-Butanol 71-36-3 | EC50 (96h) > 500 mg/L Desmodesmus subspicatus EC50 (72h) > 500 mg/L Desmodesmus subspicatus | LC50 (96h) static = 1910000 µg/L Pimephales promelas LC50 (96h) static 1730 - 1910 mg/L Pimephales promelas LC50 (96h) static 100000 - 500000 µg/L Lepomis macrochirus LC50 (96h) flow-through = 1740 mg/L Pimephales promelas | EC50 (48h) Static 1897 - 2072 mg/L Daphnia magna EC50 (48h) = 1983 mg/L Daphnia magna |
| 2-Methyl-2,4-pentanediol 107-41-5 | - | LC50 (96h) static = 10700 mg/L Pimephales promelas LC50 (96h) flow-through = 8690 mg/L Pimephales promelas LC50 (96h) flow-through 10500 - 11000 mg/L Pimephales promelas LC50 (96h) static = 10000 mg/L Lepomis macrochirus | EC50 (48h) 2700 - 3700 mg/L Daphnia magna |
| Lauryl Alcohol 112-53-8 | EC50 (96h) = 0.62 mg/L Desmodesmus subspicatus | LC50 (96h) = 0.1855 mg/L Pimephales promelas LC50 (96h) flow-through = 1.01 mg/L Pimephales promelas | EC50 (48h) = 320 mg/L Daphnia magna |
| Sodium chloride 7647-14-5 | - | LC50 (96h) static = 12946 mg/L Lepomis macrochirus LC50 (96h) static 6020 - 7070 mg/L Pimephales promelas LC50 (96h) flow-through 5560 - 6080 mg/L Lepomis macrochirus LC50 (96h) | EC50 (48h) Static 340.7 - 469.2 mg/L Daphnia magna EC50 (48h) = 1000 mg/L Daphnia magna |

| | | | |
|---------------------------------------|---|---|--|
| | | static 6420 - 6700 mg/L Pimephales promelas LC50 (96h) semi-static = 7050 mg/L Pimephales promelas LC50 (96h) flow-through 4747 - 7824 mg/L Oncorhynchus mykiss | |
| Sodium sulfate anhydrous 7757-82-6 | - | LC50 (96h) = 13500 mg/L Lepomis macrochirus LC50 (96h) 13500 - 14500 mg/L Pimephales promelas LC50 (96h) static > 6800 mg/L Pimephales promelas LC50 (96h) static 3040 - 4380 mg/L Lepomis macrochirus | EC50 (96h) = 630 mg/L Daphnia magna EC50 (48h) = 2564 mg/L Daphnia magna |
| 1-Tetradecanol 112-72-1 | EC50 (96h) > 10 mg/L Desmodesmus subspicatus | LC50 (96h) > 10000 mg/L Brachydanio rerio | - |
| Formaldehyde 50-00-0 | - | LC50 (96h) static = 1510 µg/L Lepomis macrochirus LC50 (96h) static 100 - 136 mg/L Oncorhynchus mykiss LC50 (96h) flow-through 0.032 - 0.226 mL/L Oncorhynchus mykiss LC50 (96h) static = 41 mg/L Brachydanio rerio LC50 (96h) flow-through 22.6 - 25.7 mg/L Pimephales promelas LC50 (96h) static 23.2 - 29.7 mg/L Pimephales promelas | LC50 (48h) = 2 mg/L Daphnia magna EC50 (48h) Static 11.3 - 18 mg/L Daphnia magna |

12.2. Persistence and Degradability

No information available.

12.3. Bioaccumulation

No information available.

| Chemical name | Partition coefficient |
|--------------------------------------|-----------------------|
| n-Butanol 71-36-3 | 0.785 |
| 2-Methyl-2,4-pentanediol 107-41-5 | <0.14 |
| Lauryl Alcohol 112-53-8 | 5.36 |
| 1-Tetradecanol 112-72-1 | 5.5 |

12.4. Other Adverse Effects

No information available

13. Disposal Considerations**13.1. Waste Treatment Methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Do not reuse container.

14. Transport Information

| | |
|-------------------|---------------|
| <u>DOT</u> | NOT REGULATED |
| <u>TDG</u> | NOT REGULATED |
| <u>MEX</u> | NOT REGULATED |
| <u>ICAO (air)</u> | NOT REGULATED |
| <u>IATA</u> | NOT REGULATED |
| <u>IMDG</u> | NOT REGULATED |

15. Regulatory Information**15.1. International Inventories**

| | |
|----------|-----------------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| ENCS | Does not comply |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

15.2. US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name | SARA 313 - Threshold Values % |
|---------------------|-------------------------------|
| n-Butanol - 71-36-3 | 1.0 |

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute Health Hazard | Yes |
| Chronic health hazard | No |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|----------------------|--------------------------|----------------|--|
| n-Butanol 71-36-3 | 5000 lb | - | RQ 5000 lb final RQ RQ 2270 kg final RQ |

15.3. US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical name | California Proposition 65 |
|------------------------|---------------------------|
| Formaldehyde - 50-00-0 | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------------|------------|---------------|--------------|
| 2-Methyl-2,4-pentanediol 107-41-5 | X | X | X |
| n-Butanol 71-36-3 | X | X | X |
| Formaldehyde 50-00-0 | X | X | X |

16. Other information, including date of preparation of the last revision

| | | | | |
|-------------|------------------|----------------|--------------------|------------------------------------|
| NFPA | Health Hazards 1 | Flammability 0 | Instability 0 | Physical and chemical properties - |
| HMIS | Health Hazards 1 | Flammability 0 | Physical Hazards 0 | Personal Protection X |

Revision date 21-Mar-2018

Revision note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet