Safety Data Sheet

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

Product name CHEMGUARD CX (XTRA) Hi-Ex

1. Identification

1.1. Product Identifier

Product name CHEMGUARD CX (XTRA) Hi-Ex

1.2. Other means of identification

Product code 770188
Synonyms None
Chemical Family Fire fighting foam, surfactant

1.3. Recommended use of the chemical and restrictions on use

Recommended use Fire extinguishing agent.
Uses advised against None known.

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)

Serious eye damage/eye irritation - Category 2
Carcinogenicity - Category 1A

2.2. Label Elements

Signal Word
DANGER

Hazard Statements
Causes serious eye irritation
May cause cancer

Precautionary Statements

Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling.

Response
IF exposed or concerned: Get medical advice/attention.
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.

Storage
Store locked up.

Disposal
Dispose of contents/container to an approved waste disposal plant.

2.3. Hazards Not Otherwise Classified (HNOC)
Not Applicable.

2.4. Other Information
Toxic to aquatic life with long lasting effects.

Unknown Acute Toxicity — 12.4975% of the mixture consists of ingredient(s) of unknown toxicity

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-%
2-(2-Butoxyethoxy)ethanol	112-34-5	7 - 13
Trade secret	Proprietary	3 - 7
Sulfuric Acid, mono-C10-16 esters, Ammonium salts	68081-96-9	3 - 7
Lauryl Alcohol	112-53-8	1 - 5
Isopropanol	67-63-0	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

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
2-(2-Butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm inhalable fraction and vapor	-	-	-
Isopropanol 67-63-0	STEL: 400 ppm TWA: 200 ppm	-	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³	TWA 400 ppm (VLE-PPT) TWA 980 mg/m³ (VLE-PPT) STEL 500 ppm(PPT-CT) STEL 1225 mg/m³(PPT-CT)

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
Odor Slight solvent **Color** Amber
Odor Threshold No data available

Property	Values	Remarks • Method
pH	7.0 - 8.5	
Melting point/freezing point	2 °C / 36 °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	1.00 - 1.20
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
2-(2-Butoxyethoxy)ethanol	= 5660 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-

112-34-5			
Lauryl Alcohol 112-53-8	> 12800 mg/kg (Rat)	-	-
Isopropanol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m³ (Rat) 4 h
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).
Sensitization No information available.
Germ Cell Mutagenicity No information available.
Carcinogenicity No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Isopropanol 67-63-0	-	Group 3	-	X

IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive Toxicity No information available.
STOT - Single Exposure No information available.
STOT - Repeated Exposure No information available.
Target organ effects 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.

6.4975% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
2-(2-Butoxyethoxy)ethanol 112-34-5	EC50 (96h) > 100 mg/L Desmodesmus subspicatus	LC50 (96h) static = 1300 mg/L Lepomis macrochirus	EC50 (48h) > 100 mg/L Daphnia magna EC50 (24h) = 2850 mg/L Daphnia magna
Sulfuric Acid, mono-C10-16 esters, Ammonium salts 68081-96-9	EC50 (96h) = 42 mg/L Desmodesmus subspicatus	LC50 (48h) static = 19 mg/L Leuciscus idus	EC50 (24h) = 56 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
Isopropanol 67-63-0	EC50 (72h) > 1000 mg/L Desmodesmus subspicatus EC50 (96h) > 1000 mg/L Desmodesmus subspicatus	LC50 (96h) flow-through = 9640 mg/L Pimephales promelas LC50 (96h) static = 11130 mg/L Pimephales promelas LC50 (96h) > 1400000 µg/L Lepomis macrochirus	EC50 (48h) = 13299 mg/L Daphnia magna
1-Tetradecanol 112-72-1	EC50 (96h) > 10 mg/L Desmodesmus subspicatus	LC50 (96h) > 10000 mg/L Brachydanio rerio	-

12.2. Persistence and Degradability

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Biodegradability (B.O.D./C.O.D.)	56 %
Total Organic Carbon	78,500 mg/l

12.3. Bioaccumulation

No information available.

Chemical name	Partition coefficient
Lauryl Alcohol 112-53-8	5.36
Isopropanol 67-63-0	0.05
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

DOT NOT REGULATED

TDG NOT REGULATED

MEX NOT REGULATED

ICAO (air) NOT REGULATED

IATA NOT REGULATED

IMDG NOT REGULATED

15. Regulatory Information

15.1. International Inventories

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

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 %
2-(2-Butoxyethoxy)ethanol - 112-34-5	1.0
Isopropanol - 67-63-0	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic health hazard	Yes
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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

15.3. US State Regulations

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
2-(2-Butoxyethoxy)ethanol 112-34-5	X	-	X
Isopropanol 67-63-0	X	X	X

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

NFPA	**Health Hazards** 2	**Flammability** 0	**Instability** 0	**Physical and chemical properties** -
HMIS	**Health Hazards** 2*	**Flammability** 0	**Physical Hazards** 0	**Personal Protection** X

Revision date 21-Dec-2017
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