



Safety Data Sheet

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

Product name JET-X 2 3/4% High-Expansion Foam Concentrate

1. Identification

1.1. Product Identifier

Product name JET-X 2 3/4% High-Expansion Foam Concentrate

1.2. Other means of identification

Product code 420008
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)

Serious eye damage/eye irritation - Category 2A

2.2. Label Elements

Signal Word

WARNING

Hazard Statements

Causes serious eye irritation



Precautionary Statements



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Prevention

Wash face, hands and any exposed skin thoroughly after handling. Wear eye/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.

2.3. Hazards Not Otherwise Classified (HNOC)

Not Applicable.

2.4. Other Information

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

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-%
Ammonium Alcohol ether sulfate (C8-C10)	68891-29-2	10 - 30
Ethanol	64-17-5	1 - 5
Sulfuric Acid, mono-C10-16 esters, Ammonium salts	68081-96-9	1 - 5
Lauryl Alcohol	112-53-8	1 - 5

4. First aid measures

4.1. Description of first aid measures

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.



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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
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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.
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For emergency responders	Use personal protection recommended in Section 8.
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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.
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6.3. Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
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Methods for Cleaning Up	Pick up and transfer to properly labeled containers.
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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.
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7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.
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Incompatible Materials	Strong oxidizing agents. Strong acids. Strong bases.
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8. Exposure Controls/Personal Protection

**8.1. Control Parameters****Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL
Ethanol 64-17-5	STEL: 1000 ppm	-	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³	TWA 1000 ppm (VLE-PPT) TWA 1900 mg/m ³ (VLE-PPT)

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	Green
Odor	Characteristic		
Odor Threshold	No data available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7	
Melting point/freezing point	No data available	
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	No data available	
Water Solubility	No data available	
Solubility in Other Solvents	No data available	
Partition coefficient	No data available	



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Autoignition Temperature No data available
Decomposition Temperature No data available
Kinematic viscosity No data available

VOC content (%) 13.542

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

Inhalation No data available.
Eye Contact Severely irritating to eyes.
Skin contact No data available.
Ingestion No data available.

Component Information

Acute Toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
Lauryl Alcohol 112-53-8	> 12800 mg/kg (Rat)	-	-

**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****Serious eye damage/eye irritation** Severely irritating to eyes.**Carcinogenicity** Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethanol 64-17-5	A3	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

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.**Chronic Toxicity** May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.**Target organ effects** Blood, Central Nervous System, Eyes, Liver, Reproductive system, 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

ATEmix (inhalation-dust/mist) 2163.5 mg/l

12. Ecological Information**12.1. Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Dipropylene glycol 25265-71-8	-	LC50 (24h) static > 5000 mg/L Carassius auratus	-
Ethanol 64-17-5	-	LC50 (96h) static 12.0 - 16.0 mL/L Oncorhynchus mykiss LC50 (96h) flow-through 13400 - 15100 mg/L Pimephales promelas LC50 (96h) static > 100 mg/L Pimephales promelas	EC50 (24h) = 10800 mg/L Daphnia magna LC50 (48h) 9268 - 14221 mg/L Daphnia magna EC50 (48h) Static = 2 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



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12.2. Persistence and Degradability

No information available.

12.3. Bioaccumulation

No information available.

Chemical name	Partition coefficient
Ethanol 64-17-5	-0.32
Lauryl Alcohol 112-53-8	5.36

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	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
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



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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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

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, 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

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Ethanol - 64-17-5	Carcinogen Developmental

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	X	X	X
di-Sodium hydrogen phosphate anhydrous 7558-79-4	X	X	X

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

NFPA	Health Hazards 2	Flammability 1	Instability 0	Physical and chemical properties -
HMIS	Health Hazards 2	Flammability 1	Physical Hazards 0	Personal Protection X

Revision date 11-Jun-2018

Revision note No information available.



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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