



MATERIAL SAFETY DATA SHEET

by Tyco Fire Suppression & Building Products

JET-X 2.75%

Product Code: 1020-2-014 ANa

Issue Date: 07-31-2010

1. Product and Company Identification

Material name	JET-X 2.75%
Version #	01
Revision date	07-31-2010
CAS #	Mixture
Product Code	1020-2-014 ANa
Product use	Fire extinguishing agent
Manufacturer / Importer / Supplier	
Name	Tyco Fire Suppression and Building Products
Address	One Stanton Street Marinette, WI 54143-2542
Phone	715-735-7411
Internet	http://www.ansul.com
Emergency Phone Number	CHEMTREC 800-424-9300 or 703-527-3887

2. Hazards Identification

Emergency overview	WARNING! Combustible liquid and vapor. Causes skin and eye irritation. Keep out of reach of children. Prolonged exposure may cause chronic effects.
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Eye contact. Skin contact. Inhalation. Ingestion.
Eyes	Do not get this material in contact with eyes.
Skin	Avoid contact with the skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Inhalation	Vapors may irritate mucous membranes. Do not breathe vapor.
Ingestion	Not a likely route of entry. Do not ingest.
Target organs	Eyes. RESPIRATORY SYSTEM. Skin. Central nervous system.
Chronic effects	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Signs and symptoms	Irritation of nose and throat. Irritation of eyes and mucous membranes. Defatting of the skin. Rash. Skin irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
LAURYL ALCOHOL	112-53-8	1 - 2.5
ETHANOL	64-17-5	2.5 - 10
DIPROPYLENE GLYCOL	25265-71-8	2.5 - 10
Other components below reportable levels		80 - 90

4. First Aid Measures

First aid procedures	
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing.
Skin contact	Wash off with warm water and soap. Get medical attention if irritation develops and persists.
Inhalation	Move to fresh air. For breathing difficulties, oxygen may be necessary. Get medical attention, if needed.

Ingestion

Rinse mouth. Do not induce vomiting without advice from poison control center. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Notes to physician

Symptoms may be delayed.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures**Flammable properties**

No unusual fire or explosion hazards noted.

Extinguishing media**Suitable extinguishing media**

This product is not flammable. Use extinguishing agent suitable for type of surrounding fire.

Protection of firefighters**Specific hazards arising from the chemical**

None known.

Specific methods

None known.

Hazardous combustion products

May include oxides of nitrogen.

6. Accidental Release Measures**Personal precautions**

Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Surfaces may become slippery after spillage. Keep upwind.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods for containment

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up

Should not be released into the environment.

Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece).

Never return spills in original containers for re-use. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination.

7. Handling and Storage**Handling**

Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged exposure. Handle and open container with care.

Storage

Store in cool place. Store in a well-ventilated place. Keep container tightly closed. Keep out of the reach of children. Use care in handling/storage.

8. Exposure Controls / Personal Protection**Occupational exposure limits****ACGIH****Components****Type****Value**

ETHANOL (64-17-5)

STEL

1000.0000 ppm

U.S. - OSHA**Components****Type****Value**

ETHANOL (64-17-5)

PEL

1900.0000

mg/m3

1000.0000 ppm

TWA

1900.0000

mg/m3

1000.0000 ppm

Personal protective equipment

Eye / face protection	Do not get in eyes. Wear approved chemical safety glasses or goggles where eye exposure is reasonably probable.
Skin protection	Wear appropriate chemical resistant clothing. Chemical resistant gloves.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
General hygiene considerations	When using do not smoke. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance

Form	Liquid.
Color	Green.
Odor	Mild. Sweet.

Physical state

Liquid.

pH

7 - 8.5

Melting point

Not available.

Freezing point

Not available.

Boiling point

210.2 °F (99 °C)

Flash point

160 °F (71.1 °C)

Evaporation rate

Not available.

Flammability limits in air, upper, % by volume

Not available.

Flammability limits in air, lower, % by volume

Not available.

Vapor pressure

Not available.

Vapor density

Not available.

Specific gravity

1.02

Relative density

Not available.

Solubility (water)

Not available.

Partition coefficient (n-octanol/water)

Not available

Auto-ignition temperature

Not available.

Decomposition temperature

Not available.

VOC

Not available.

10. Chemical Stability & Reactivity Information

Chemical stability

Material is stable under normal conditions.

Conditions to avoid

None known.

Incompatible materials

Alkaline metals. Strong acids, alkalies and oxidizing agents.

Hazardous decomposition products

Nitrogen oxides (NOx). Sulfur oxides. Carbon oxides.

11. Toxicological Information

Toxicological information

The toxicity of this product has not been tested.

Toxicological data

Components

LAURYL ALCOHOL (112-53-8)

Test Results

Acute Dermal LD50 Guinea pig: > 8310 mg/kg

Acute Inhalation LC50 Rat: > 1.05 mg/l

Acute Oral LD50 Rat: 12800 mg/kg

Acute Other LD50 Rat: 800 mg/kg

DIPROPYLENE GLYCOL (25265-71-8)

Acute Dermal LD50 Rabbit: 20 ml/kg

Acute Oral LD50 Guinea pig: 17.6 g/kg

Components	Test Results
DIPROPYLENE GLYCOL (25265-71-8)	Acute Oral LD50 Rat: 14.8 ml/kg Acute Other LD50 Dog: 11.79 g/kg Acute Other LD50 Mouse: 4600 mg/kg Acute Other LD50 Rat: 5800 mg/kg Acute Other LD50 Rat: 10.56 g/kg
ETHANOL (64-17-5)	Acute Inhalation LC50 Mouse: 0.039 mg/l 4.00 Hours Acute Inhalation LC50 Rat: 20000 mg/l 10.00 Hours Acute Oral LD50 Dog: 5.5 g/kg Acute Oral LD50 Guinea pig: 5.6 g/kg Acute Oral LD50 Mouse: 3450 mg/kg Acute Oral LD50 Rat: 7060 mg/kg Acute Oral LD50 Rat: 6.2 g/kg Acute Other LD50 Mouse: 933 mg/kg Acute Other LD50 Rat: 1440 mg/kg
Local effects	Components of the product may be absorbed into the body through the skin. Blood disorder may occur after ingestion. Liver toxicity. Contact may irritate or burn eyes.
Chronic effects	Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects.
Subchronic effects	Blood disorder may occur after prolonged inhalation. Blood disorder may occur after ingestion. Blood disorder may occur after prolonged skin contact.
Carcinogenicity	Hazardous by OSHA criteria. Cancer Hazard.
ACGIH Carcinogens	
ETHANOL (CAS 64-17-5)	A3 Confirmed animal carcinogen with unknown relevance to humans.
IARC Monographs. Overall Evaluation of Carcinogenicity	
ETHANOL (CAS 64-17-5)	1 Carcinogenic to humans.
US NTP Report on Carcinogens: Known carcinogen	
ETHANOL (CAS 64-17-5)	Known carcinogen.
Epidemiology	Hazardous by OSHA criteria.
Neurological effects	Hazardous by OSHA criteria.
Reproductive effects	Hazardous by OSHA criteria. Possible reproductive hazard. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility.
Further information	Reproductive toxicity. Symptoms may be delayed.

12. Ecological Information

Ecotoxicological data	
Components	Test Results
LAURYL ALCOHOL (112-53-8)	LC50 Fathead minnow (Pimephales promelas): 1.01 mg/l 96.00 hours
ETHANOL (64-17-5)	EC50 Water flea (Daphnia magna): 7.7 - 11.2 mg/l 48.00 hours LC50 Fathead minnow (Pimephales promelas): > 100 mg/l 96.00 hours
Ecotoxicity	This material is not expected to be harmful to aquatic life.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
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CERCLA (Superfund) reportable quantity

ETHANOL: 100.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Acute Health - Yes Chronic Health - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No
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Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations	WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.
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US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ETHANOL (CAS 64-17-5) Listed: July 1, 1988 Carcinogenic.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

ETHANOL (CAS 64-17-5) Listed: October 1, 1987 Developmental toxin.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

DIPROPYLENE GLYCOL (CAS 25265-71-8) Listed.

16. Other Information

Further information	HMIS® is a registered trade and service mark of the NPCA.
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HMIS® ratings

Health: 1*
Flammability: 2
Physical hazard: 0

NFPA ratings

Health: 1
Flammability: 2
Instability: 0

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.

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