

AQUEOUS FILM FORMING FOAM EXTINGUISHING AGENT-AFFF (Liquid Concentrate) Print Date:29.02.2016

Section 1: IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

Material Identification

Product: AFFF3% Aqueous Film Forming Foam Extinguishing Agent

Synonyms: AFFF3% Fire Fighting Foam Concentrate

AFFF3% Foam Concentrate

CAS No: Mixture - No single CAS # applicable

Company Identification

Manufacturer: Jiangsu Suolong Fire Science and Technology Co., Ltd. Address: :Kangmin Road, Xinghua City, Jiangsu Province, China

Tel: (86)523-82300896 Fax: (86)523-82300896

E-mail: suolong@suolong.com, Website: www.suolong.com,

Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

| 40% | ~ | 50% | Distilled Water | CAS:7732-18-5 |
|-----|---|-----|-------------------------|-----------------------------|
| 5% | ~ | 30% | Hydrocarbon Surfactants | Mixture , No Single CAS No. |
| 1% | ~ | 5% | Fluoro Surfactant | Mixture , No Single CAS No. |
| 1% | ~ | 5% | urea | CAS: 89774-74-3 |
| 1% | ~ | 10% | Ethylene Glycol | CAS: 107-21-1 |
| 1% | ~ | 15% | Butyl Glycol Ether | CAS: 112-34-5 |

Section 3: HAZARDS IDENTIFICATION

Potential Health Effects

Inhalation

Vapors are minimal at room temperature. If product is heated or sprayed as an aerosol, airborne material may cause respiratory irritation.

Skin Contact

Contact with liquid may cause moderate irritation or dermatitis due to removal of oils from the skin.

Eye Contact

Product is an eye irritant.

Ingestion

Not a hazard in normal industrial use. Small amounts swallowed during normal handling operations are not likely to cause injury; swallowing large amounts may cause injury or irritation.

Carcinogenicity Information

No data available.



Section 4: FIRST AID MEASURES

Inhalation

No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of airborne aerosol mists, remove to fresh air. Seek medical attention if effects occur.

Skin Contact

In case of skin contact, wash off in flowing water or shower. Launder clothing before reuse.

Eye Contact

In case of eye contact, flush eyes promptly with water for 15 minutes. Retract eyelids often to ensure thorough rinsing. Consult a physician if irritation persists.

Ingestion

Swallowing less than an ounce is not expected to cause significant harm. For larger amounts, do not induce vomiting. Give milk or water. Never give anything by mouth to an unconscious person. Seek medical attention.

Section 5: FIRE FIGHTING MEASURES

Flammable Properties

Flash Point - Not applicable

Fire and Explosion Hazards

Avoid contact with water reactive materials, burning metals and electrically energized equipment.

Extinguishing Media

Product is an extinguishing media. Use media appropriate for surrounding materials.

Special Fire Fighting Instructions

This product will produce foam when mixed with water.

Section 6: ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (Personnel) sections before proceeding with clean-up. Use appropriate Personal Protective Equipment during clean-up.

Accidental Release Measures

Concentrate

Stop flow if possible. Use appropriate protective equipment during clean up. For small volume releases, collect spilled concentrate with absorbent material; place in approved container. For large volume releases, contain and collect for use where possible. Flush area with water until it no longer foams. Exercise caution, surfaces may be slippery. Prevent discharge of concentrate to waterways. Disposal should be made in accordance with National, federal, state and local regulations.

Foam/Foam Solution

See above. Flush with water. Prevent discharge of foam/foam solution to waterways. Do not discharge into biological sewer treatment systems without prior approval. Disposal should be made in accordance with National, federal, state and local regulations.



Section 7: HANDLING AND STORAGE

Handling (Personnel)

Avoid contact with eyes, skin or clothing. Avoid ingestion or inhalation. Rinse skin and eyes thoroughly in case of contact. Review HAZARDS and FIRST AID sections.

Storage

Recommended storage environment is between -6°C and $+50^{\circ}\text{C}$. Store product in original packaging container or tanks designed for product storage.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Special ventilation is not required.

Personal Protective Equipment

Respiratory

Recommended exposure limits have not been determined for this material. Respiratory protection not needed for normal use. The need for respiratory protection should be evaluated by a qualified health specialist.

Protective Clothing

Rubber or PVC gloves recommended.

Eye Protection

Safety glasses, face shield or chemical splash goggles must be worn when possibility exists for eye contact. Contact lenses should not be worn. Eye wash facilities are recommended.

Other Hygienic Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse.

Exposure Guidelines

Exposure Limits

(2-Methoxymethylethoxy) Propanol (34590-94-8)

PEL(OSHA)

100 ppm, 8 hr. TWA Skin 150 ppm, 15 min. STEL Skin

TLV (ACGIH)

100 ppm, 8 hr. TWA Skin 150 ppm, 15 min. STEL Skin

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Appearance and colour: Pale yellow liquid

Boiling Point: Not applicable

Vapor Pressure: Not applicable

Vapor Density: Not applicable

■ Melting Point: Not applicable

Evaporation Rate: <1 (Butyl Acetate = 1.0)</p>

Solubility in Water: 100%

■ pH: 7.0 - 9.0 @ 20°C 8.06

Specific Gravity: @ 20°C 1.00 ~ 1.05

Odor: Mild, pleasant

■ Freezing Point: -11 °C



Section 10: STABILITY AND REACTIVITY

Chemical Stability

Stable.

Incompatibility, Materials to Avoid

Avoid use of product on burning metals, electrically-energized equipment and contact with water reactive materials.

Polymerization

Will not occur.

Section 11: TOXICOLOGICAL INFORMATION

Mammalian Toxicity

Ingestion

This material was not toxic when administered to Wistar Albino rats at an acute oral dose of 5g/kg body weight.

Eve

Animal testing indicates this material is a primary eye irritant when tested undiluted on New Zealand Albino Rabbits.

• Skin

Animal testing indicates this material is not a primary skin irritant when tested undiluted on New Zealand Albino Rabbits.

Inhalation

No data available at this time.

Carcinogenic/Developmental/Reproductive/Mutagenic Effects

No data available on this material.

Section 12: ECOLOGICAL INFORMATION

Adopt good working practices, so that the product is not released into the environment. BIODEGRADABLE

Section 13: DISPOSAL CONSIDERATIONS

In so doing, comply with the local and national regulations currently in force.

Concentrate

Do not discharge into biological sewer treatment systems without prior approval. Specific concerns are high BOD load and foaming tendency. Low dosage flow rate or antifoaming agents acceptable to the treatment plant may be helpful. Do not flush to waterways. Disposal should be made in accordance with the local and national regulations.

Foam/Foam Solution

Our AFFF3% foam solution can be treated by waste water treatment facilities.

Discharge into biological sewer treatment facilities may be done with prior approval. Specific concerns are high BOD load. Dilution will reduce BOD and COD factors

proportionately. Low dosage flow rate or antifoaming agents acceptable to the treatment plant may be helpful. Do not flush to waterways. Disposal should be made in accordance with the local and national regulations.

NOTE: As a service to our customers, Jiangsu Suolong Fire Science and Technology Co., Ltd. has approvals in place with disposal facilities for waste water treatment and solidification and landfill of our foam liquid concentrates and foam solutions. If required, Jiangsu Suolong Fire Science and Technology Co., Ltd. can also provide information on the disposal of drums used for shipping our concentrates. Please contact Jiangsu Suolong Fire Science and Technology Co., Ltd. by Tel: (86)523-82300896 E-mail: suolong@suolong.com for additional information.



Section 14: TRANSPORTATION INFORMATION

Shipping Information

Hazard Class: None, The **AFFF3%** Fire Fighting Foam Concentrate is not hazardous, For transportation, this product can be created as ordinary goods.

OTHER REGULATORY INFORMATION

None.

Section 15: REGULATORY INFORMATION

Irritant

Irritating to eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Avoid contact with skin and eyes.

Section 16: OTHER INFORMATION

CFPA Rating

Health 0

Flammability 0

Reactivity 0

For further information, see Jiangsu Suolong Fire Science and Technology Co., Ltd. product description for AFFF3%.

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