

## Safety Data Sheet (SDS)

### 1. Product & Company Identification

Product Name

Newalpha Foam 3310A (Type Approval Number: Foam No. 27-5)

Manufacturer : Yamato Protec Corporation  
Address : 5-17-2 Shirokanedai, Minato-ku, Tokyo  
Phone Number : 0570-080100 (Navi Dial)  
Department : Technical Support

Suggested Use & Limitations on Use : Fire Extinguishing Agent

### 2. Hazards Identification

GHS Classification

Items not listed below are “Unclassifiable” or “Not eligible for classification”

Physical Hazards

Flammable Liquids : Not classified

Health Hazards

Acute toxicity, oral : Not classified

Acute toxicity, dermal : Not classified

Acute toxicity, inhalation: vapours : Not classified

Acute toxicity, inhalation: dusts and mists : Not classified

Serious Eye Damage/Eye Irritation : Category 2

Specific Target Organ Toxicity, Single exposure : Category 1

Specific Target Organ Toxicity, Repeated exposure : Category 1

: Category 2

Environmental hazards

Hazardous to the aquatic environment, acute hazard : Category 2

Hazardous to the aquatic environment, long-term hazard : Category 3

Representation or Symbol:



Alert Level

: Danger

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#### Health hazard statements

- Causes serious eye irritation
- May cause cancer
- May damage fertility or the unborn child
- Cause damage to organs (respiratory system, heart, kidney, central nerve system).
- Causes damage to organs through prolonged or repeated exposure.  
(respiratory system, heart, kidney, central nerve system)
- May causes damage to organs through prolonged or repeated exposure.  
(liver, inhalation of dust : autonomic nervous system)
- Harmful to aquatic life
- Harmful to aquatic life with long lasting effects

#### Precautionary statement

##### Safety Precautions

- Avoid release to the environment.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Wear respiratory protection.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wash hands thoroughly after handling.

#### First Aid Measures

##### IF SWALLOWED

- Call a POISON CENTER/ doctor if you feel unwell.

##### 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 water and soap.
- If experiencing respiratory symptoms: Get medical advice/attention.

##### If exposed

- Get medical advice/attention.

#### Storage

- Avoid high humidity, keep the product within the operating temperature range, and if possible, under lock indoors.

#### Disposal

- The contents and the container should be disposed of by waste disposal contractors licensed by the Governor.

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### 3. Composition/Information on Ingredients

Single Component or Mixture : Mixture  
Chemical Name or Common Name : Fire extinguishing foam  
(Aqueous film-forming fire extinguishing foam)

Chemical Name or Common Name	CAS Number	Chemical Substances Control Law number Industrial Safety and Health Law number	Concentration or Concentration Range
Water	7732-18-5	Not covered Available	50 to 60%
Ethylene glycol	107-21-1	(2)-230 Available	10 to 20%
Hydrocarbon surfactant	Available	Available Available	5 to 15%
Diethylene glycol hexyl ether	112-59-4	(2)-2424 Available	5 to 10%
Fluorochemical surfactant	Available	Before public notice Available	1 to 5%
Cationic polymer	Available	Available Available	1 to 5%
Adipic acid	124-04-9	(2)-858 Available	1 to 5%
Diethylene glycol monobutyl ether	112-34-5	(2)-422 2-(8)-99	1 to 5%
Ethanol	Available	Available Available	1 to 5%
Sodium chloride	7647-14-5	(1)-236 Available	1 to 5%

### 4. First Aid Measures

#### IN INHALED

Remove person to fresh air and keep comfortable for breathing. Gargle with water.

When vomiting occurs naturally, tilt the body so that vomit will not choke the respiratory tract.

#### IF ON SKIN

Take off immediately all contaminated clothing.

Wash with plenty of water and soap.

#### IF IN EYES

Rinse immediately with clean water for at least 5 minutes.

There is a possibility of hurting the eyeball, so do not rub. Get medical advice/ attention.

#### SWALLOWED

Drink water or milk to dilute agent in the stomach (Do not induce vomiting).

Wash your mouth with water (only if the person did not lose his consciousness).

Call a POISON CENTER/ doctor if you feel unwell.

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## 5. Fire Fighting Measures

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Fire Extinguishing Agent	: Foam, water mist, dry sand, powder.
Special Fire Fighting Procedures	: A surrounding fire: spray and cool Ignition: Discontinue fire and extinguish from windward using appropriate fire extinguishing agent.
Protection of Fire Fighters	: Wear respiratory protection

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## 6. Leakage Measures

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### Personal Precautions, Protective Equipment and Emergency Measures

The workers should wear suitable protective equipment (See “8. Exposure Prevention and Protection Measures”) and avoid eye or skin contact and inhalation.

Stay in the wind.

Ventilate sealed places.

Prohibit unauthorized persons from entering the area.

### Environmental Precautions

Be careful not to affect the environment by discharging into rivers and others.

Dispose of the collection as industrial waste.

### Prevention of Secondary hazards

Prohibit unauthorized persons from entering the area around the leaked place.

In the case of inflow into rivers or public waterways, report to the person in charge of pollution in the local government immediately.

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## 7. Handling and Storage Instructions

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### Handling

Careful handling and opening of containers. Do not eat, drink when using this product.

Avoid contact with skin Avoid contact with eye

If in eye rinse wash with plenty of water. Get medical advice.

Take off immediately all contaminated clothing.

If on skin wash with plenty of water and soap.

### Technical Measures

Use only in well ventilated areas.

Handle near a shower, a hand washing, or an eye washing facility.

Display the positions of these facilities.

Wearing contact lenses during work is not preferable.

Work at the location where the local exhaust system is installed.

Wear eye / face protection.

Wear suitable protective clothing and eye / face protection.

After handling, wash hands and eyes thoroughly.

### Safe Handling Instructions

No knowledge

### Contact avoidance

No data available

### Storage

Remove from heat Seal the container

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## 8. Exposure Prevention and Protection Measures

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### Allowable Concentration

Ethylene glycol STEL C 100mg/m<sup>3</sup>, Upper limit (ACGIH)

Diethylene glycol monobutyl ether TLV-TWA 10 ppm (67.5 mg/m<sup>3</sup>) (IFV)

### Equipment Measures

Handle near a shower, a hand washing, or an eye washing facility.

Display the positions of these facilities.

### Protective Equipment

Respiratory Protective Equipment : Wear suitable respiratory protective equipment.

Hand Protection : Wear suitable protective gloves.

Eye Protection : Wear suitable protective glasses.

Skin and Body Protection : Wear suitable protective clothing and masks.

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## 9. Physical and Chemical Properties

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Appearance	
Physical State	: Liquid
Color	: Light brown
Odor	: Unique odor
pH	: 7.0~7.8 (20 °C)
Melting Point, Freezing Point	: -15 °C or less
Boiling Point, Initial Boiling Point and Boiling Range	: 100 °C
Flash Point	: None
Explosion Limits	: No data available
Vapor Pressure	: No data available
Vapor Density (air = 1)	: No data available
Specific Gravity (relative density)	: 1.08 (20 °C)
Solubility	: Easily soluble in water
Viscosity	: 31 cSt (20 °C : Cannon-Fenske)

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## 10. Stability and Reactivity

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Stability	: Stable under normal handling conditions
Reactivity	: No data available
Hazardous Reactivity	: No data available
Conditions to Avoid	: No data available
Incompatible Hazardous Materials	: No data available
Hazardous Decomposition Products	: HF (hydrogen fluoride), F <sub>2</sub> (fluorine gas) and fluorocarbons can be generated.

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## 11. Toxicological Information

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Acute Toxicity (oral)	: Calculated value (ATEmix)>2000
Acute Toxicity (dermal)	: Calculated value (ATEmix)>2000
Acute Toxicity (inhalation : gases)	: Not applicable
Acute Toxicity (inhalation : vapours)	: Calculated value (ATEmix)>2000
Acute Toxicity (inhalation : dust/mist)	: Calculated value (ATEmix)>2000
Skin Corrosion/Irritation	: No data available
Serious Eye Damage/Eye Irritation	: 10×(skin Category 1+ eye Category 1) + eye Category 2,2A/2B $\geq 10\%$
Respiratory Sensitization	: No data available
Skin Sensitization	: No data available
Germ-Cell Mutagenicity	: No data available
Carcinogenicity	: 0.1% or more Category 1A component included
Reproductive Toxicity	: 0.3% or more Category 1A component included
Specific Target Organ Toxicity (Single exposure)	: 10 % or more Category 1 component included
Specific Target Organ Toxicity (Repeated exposure)	: 10 % or more Category 1 component included : 1 % or more and less than 10% Category 1 component included or 10 % or more Category 2 component included
Aspiration Hazard	: No data available

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## 12. Environmental Impact Information

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Ecotoxicity	
Hazardous to the aquatic environment – Acute hazard	: Category 2
Hazardous to the aquatic environment – Long term hazard	: Category 3
Persistence and Decomposability	: No data available
Bioaccumulation	: No data available
Migration in soil	: No data available
Others	
Other Environmental Toxicity:	
BOD: 53000 mg/L (3% water solution)	Measurement method JIS K 0102 21
COD: 304000 mg/L (3% water solution)	Measurement method JIS K 0102 17

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### 13. Disposal Considerations

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#### Residual Waste

Disposal should be in accordance with applicable laws and local regulations. The substance should be disposed of by waste disposal contractors licensed by the Governor or by local public entities if appropriate. Waste disposal contractor, if used, should be well informed of potential hazards and toxicity from the waste.

#### Contaminated Containers and Packages

Containers should be properly disposed of in accordance with applicable laws and local regulations. If containers are disposed of, their contents should be completely removed.

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### 14. Transport Considerations

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United Nations Number	: Not applicable
Product Name	: Not applicable
United Nations Classification	: Not applicable
Container Class	: Not applicable
Marine Pollution Materials	: Not applicable
National Regulations:	
Land Regulatory Information	Follow the provisions of the Fire Service Act
Aeronautical Regulatory Information	Follow the provisions of the Civil Aeronautics Act
Maritime Regulatory Information	Follow the provisions of the Ship Safety Act

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## 15. Applicable Laws

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### Industrial Safety and Health Act

Dangerous or Harmful Substances Subject to be Indicated their Names, etc.

(Appended Table 9, Order Article 18 (1) & (2), Article 57-1 of the Act)

Ethylene glycol (Cabinet Order No. 75)

Diethylene glycol monobutyl ether (Cabinet Order No. 224-3)

Adipic acid (Cabinet Order No. 10)

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Law)

Not applicable

Poisonous and Deleterious Substances Control Act

Not applicable

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## 16. Other Information

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This product should be used with the understanding that the use of any chemicals involves unknown potential hazards and toxicity. Hazards and toxicity depend on the environment of use and the storage conditions and period. We suggest that those with knowledge and experience be involved in all stages from use through storage and disposal.

The instructions provided in this document should apply when the product is handled normally. If the product is handled in a special way, proper safety precautions should be taken. Also, it should be used under the responsibility of the user.