



# MATERIAL SAFETY DATA SHEET

by Tyco Fire Suppression & Building Products

## FORAY

Product Code: 2001-2-015 ANa

Issue Date: 07-30-2010

### 1. Product and Company Identification

**Material name** FORAY  
**Version #** 01  
**Revision date** 07-30-2010  
**CAS #** Mixture  
**Product Code** 2001-2-015 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  
Irritating to eyes and skin. Prolonged exposure may cause chronic effects.

**Potential health effects**  
**Routes of exposure** Eye contact. Skin contact. Inhalation. Ingestion.  
**Eyes** Contact with eyes may cause irritation.  
**Skin** Avoid contact with the skin. May cause skin irritation.  
**Inhalation** Inhalation of dusts may cause respiratory irritation.  
**Ingestion** Not a likely route of entry.  
**Target organs** Eyes. Respiratory system. Skin.  
**Signs and symptoms** Irritation of eyes and mucous membranes.

### 3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
Pigment Yellow 14	5468-75-7	0 - 0.1
Silicone fluid	63148-57-2	0.5 - 1.5
CALCIUM CARBONATE	471-34-1	1 - 5
FULLERS EARTH	8031-18-3	3 - 7
AMMONIUM HYDROGEN SULFATE	7783-20-2	10 - 30
Ammonium Phosphate	7722-76-1	60 - 100

### 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.

<b>Ingestion</b>	Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>General advice</b>	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

<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	This product is not flammable. Use extinguishing agent suitable for type of surrounding fire.
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	None known.
<b>Protective equipment for firefighters</b>	None known.
<b>Special protective equipment for fire-fighters</b>	None known.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available.
<b>Sensitivity to static discharge</b>	Not available.
<b>Hazardous combustion products</b>	Carbon monoxide and carbon dioxide.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits.
<b>Environmental precautions</b>	Do not contaminate water.
<b>Methods for containment</b>	If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Prevent entry into waterways, sewer, basements or confined areas.
<b>Methods for cleaning up</b>	Should not be released into the environment. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect dust using a vacuum cleaner equipped with HEPA filter. Avoid the generation of dusts during clean-up. Clean up in accordance with all applicable regulations. Following product recovery, flush area with water.
<b>Other information</b>	Clean up in accordance with all applicable regulations.

## 7. Handling and Storage

<b>Handling</b>	Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with eyes. Wash thoroughly after handling. Wear personal protective equipment.
<b>Storage</b>	Guard against dust accumulation of this material. Use care in handling/storage.

## 8. Exposure Controls / Personal Protection

<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
<b>Respiratory protection</b>	In the case of respirable dust and/or fumes, use self-contained breathing apparatus.

## 9. Physical & Chemical Properties

<b>Appearance</b>	
<b>Form</b>	Powder.
<b>Color</b>	Yellow.
<b>Odor</b>	Odorless.
<b>Physical state</b>	Solid.
<b>pH</b>	Not available.

<b>Melting point</b>	Not available.
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Specific gravity</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.

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## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Incompatible materials</b>	Strong acids.
<b>Hazardous decomposition products</b>	Carbon oxides.

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## 11. Toxicological Information

<b>Toxicological information</b>	The toxicity of this product has not been tested.
<b>Chronic effects</b>	Prolonged inhalation may be harmful. Not expected to be hazardous by WHMIS criteria.

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## 12. Ecological Information

### Ecotoxicological data

Components	Test Results
CALCIUM CARBONATE (471-34-1)	LC50 Western mosquitofish ( <i>Gambusia affinis</i> ): > 56000 mg/l 96.00 Hours
AMMONIUM HYDROGEN SULFATE (7783-20-2)	EC50 Water flea ( <i>Ceriodaphnia dubia</i> ): 52 - 67 mg/l 48.00 hours LC50 Pink salmon ( <i>Oncorhynchus gorbuscha</i> ): 0.068 mg/l 96.00 hours

<b>Ecotoxicity</b>	This material is not expected to be harmful to aquatic life.
<b>Environmental effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
<b>Persistence and degradability</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available

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## 13. Disposal Considerations

<b>Disposal instructions</b>	Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.

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## 14. Transport Information

### TDG

Not regulated as dangerous goods.

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## 15. Regulatory Information

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**Canadian regulations** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status** Non-controlled

### 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)	Yes
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)

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## 16. Other Information

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

**HMIS® ratings**  
Health: 1\*  
Flammability: 0  
Physical hazard: 0

**NFPA ratings**  
Health: 1  
Flammability: 0  
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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