Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the preparation

Product Name: "FORAY"
Chemical Name: N/A - This is a mixture/preparation.
CAS No.: N/A - This is a mixture/preparation.
Chemical Formula: N/A - This is a mixture/preparation.
EINECS Number: N/A - This is a mixture/preparation.

1.2 Use of the preparation

The intended or recommended use of this preparation is as a FIRE EXTINGUISHING AGENT.

1.3 Company Identification

Manufacturer/Supplier: Suzhou Wuyue Synthetic Chemical Factory
Address: Xiakantang, Mudu, Suzhou City, Jiangsu Province, China.
Prepared by: Safety and Health Department
Phone: 086-512-66262314
Internet/Home Page: 
Date of issue: March, 2004

1.4 Emergency telephone

086-512-66262314

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Ingredient Name: Monoammonium Phosphate
Chemical Formula: \( \text{NH}_4\text{H}_2\text{PO}_4 \)
CAS No.: 7772-76-1
EINECS Number: 231-764-5
Concentration, Wt %: 65-82 %
Hazard identification: See Heading 3
Ingredient Name: Ammonium sulfate
Chemical Formula: \( (\text{NH}_4)\text{SO}_4 \)
CAS No.: 7783-20-2
EINECS Number: 231-984
Concentration, Wt %: 3-20 %
Hazard identification: See Heading 3

2.2 Ingredient Name: Magnesium Aluminum Silicate (Attapulgite Clay or Fuller’s Earth)
Chemical Formula: \( \text{Mg}_x\text{Al}_y(\text{SiO}_4)_2 \)
CAS No.: 8031-18-3
EINECS Number: (b)
Concentration, Wt %: 5-7 %
Hazard identification: See Heading 3
Ingredient Name: Calcium Carbonate
Chemical Formula: \( \text{CaCO}_3 \)
CAS No.: 471-34-1
EINECS Number: 297-439-9
Concentration, Wt %: < 2 %
Hazard identification: See Heading 3

2.3 Ingredient Name: Methyl Hydrogen Polysiloxane
Chemical Formula: Mixture/preparation
CAS No.: 63148-57-2
EINECS Number: (a)
Concentration, Wt %: < 1 %
Hazard identification: See Heading 3
Ingredient Name: Yellow Pigment
Chemical Formula: \( \text{C}_3\text{H}_8\text{Cl}_4\text{N}_2\text{O}_4 \)
CAS No.: 5468-75-7
EINECS Number: 226-489-3
Concentration, Wt %: < 0.05 %
Hazard identification: See Heading 3

(a) EINECS does not include synthetic polymers (These are registered in EINECS under their building blocks, monomers).
See: 67/548/EEC, article 13, 79/831/EEC; and 81/437/EEC.
(b) EINECS does not include most naturally occurring raw materials. See: 67/548/EEC, article 3; 79/831/EEC; and 81/437/EEC.
NOTE: Unless a component presents a severe hazard, it does not need to be considered in the MSDS if the...
concentration is less than 1%. (According to Directive 1999/45/EC.)

3. HAZARDS IDENTIFICATION

FOR HUMANS:
Product:
EU Classification : Xn
R Phrases : 22
S Phrases : 26

Components :
Monoammonium Phosphate :
EU Classification : Xn
R Phrases : 22
S Phrases : 26

Ammonium sulfate :
EU Classification : Xi
R Phrases : 36/37/38
S Phrases : 26

Limit Values for Exposure :
Nuisance dust limit :
OSHA TWA : 15 mg/m³
ACGIH TLV-TWA : 10 mg/m³

Neither this preparation nor the substances contained in it have been listed as carcinogenic by National Toxicology Program, I. A. R. C., or OSHA.

AS PART OF GOOD INDUSTRIAL AND PERSONAL HYGIENE AND SAFETY PROCEDURE, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes, and clothing.

SIGNS AND SYMPTOMS:
Acute Exposure:
Eye Contact : Mildly irritating for short periods of time.
Skin Contact : May be mildly irritating.
Inhalation : Treat as a mineral dust irritant to the respiratory tract. Transient cough, shortness of breath.
Ingestion : Not an expected route of entry.

Chronic Overexposure:
Inhalation : Chronic fibrosis of the lung, pneumoconiosis.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE : None known.

FOR ENVIRONMENT:
No data available.

4. FIRST AID MEASURES

Eye Contact : Wash with water for a minimum of 15 minutes. If irritation persists seek medical attention.

Skin Contact : Wash affected area with soap and water. If irritation persists seek medical attention.

Inhalation : Remove from exposure. If irritation persists seek medical attention.

Ingestion : If patient is conscious, give large amounts of water and induce vomiting. Seek medical help.

5. FIRE-FIGHTING MEASURES

This preparation is an extinguishing media.
There are NO extinguishing media which must not be used for safety reasons.

No special protective equipment is needed for fire-fighters. Wear protective equipment appropriate for the fire conditions.

6. ACCIDENTAL RELEASE MEASURES

For personal protection: Prevent skin and eye contact, see Heading 8.
Clean up: Sweep up and recover for use or place in closed container for disposal, see Heading 13.

NO harm to the environment is expected from an accidental release of this preparation.

7. HANDLING AND STORAGE

7.1 Handling
Care should be taken in handling all chemical substances and preparations.
See incompatibility information in Heading 10.

7.2 Storage
No special conditions are needed for safe storage.
See incompatibility information in Heading 10.
Store in original container or Ansul fire extinguisher. Keep tightly closed until used.

There is minimal danger to the environment from a storage release.

7.3 Specific use
The intended or recommended use of this preparation is as a FIRE EXTINGUISHING AGENT.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure limit values
Nuisance dust limit:
OSHA TWA: 15mg/m³
ACGIH TLV-TWA: 10mg/m³

8.2 Exposure controls
8.2.1. Occupational exposure controls
8.2.1.1. Respiratory protection
Dust mask where dustiness is prevalent, or TLV is exceeded. Use mechanical filter respirator if exposure is prolonged.
8.2.1.2. Hand protection
None normally needed. Use chemical resistant gloves when handling the preparation.
8.2.1.3. Eye protection
Use safety glasses with side shields or safety goggles.
8.2.1.4. Skin protection
No special equipment is needed.
8.2.2 Environmental exposure controls
No special controls are needed.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information
Appearance: Yellow powder.
Odor: No odor.

9.2. Important health, safety, and environmental information
PH: Not determined.
Boiling point/boiling range: Not applicable.
Flash point: None.
Flammability (solid/gas): Not flammable.
Explosive properties: Not explosive.
Oxidizing properties: Not an oxidizer.
Vapor Pressure: Not applicable.
Relative Density: Not applicable.
Solubility:
Water solubility: Slight.
Fat solubility: Not determined.
Partition coefficient, octanol/water: Not applicable.
Viscosity: Not applicable.
Vapor density (Air = 1): Not applicable.
Evaporation rate: Not applicable.

9.3. Other information
Auto-ignition temperature: Does not ignite.

10. STABILITY AND REACTIVITY

10.1. Conditions to avoid
There are NO known conditions such as temperature, pressure, light, shock, etc., which may cause a dangerous reaction.

10.2. Materials to avoid
Strong alkalies, magnesium, oxidizers that can release chlorine or produce NCl₅ (explosive) per NFPA 10 Annex A-2.1.

10.3. Hazardous decomposition products
Normally stable.
Hazardous polymerization will NOT occur.

Ammonia and/or phosphorous oxides can be evolved at very high temperatures.

11. TOXICOLOGICAL INFORMATION

This product has not been tested for toxicological effects. Product is treated as a nuisance dust.

Components:
Monoammonium Phosphate:
Material is irritating.
Harmful if swallowed.
Ammonium sulphate:
Toxicity Data: Oral (rat) L.D₅₀ 2846 mg/kg.
Target Organs: Lungs and gastrointestinal.

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity
Not determined.
12.2. Mobility
12.3. Persistence and degradability
Not determined.
12.4. Bioaccumulative potential
Not determined.
12.5. Other adverse effects
Ozone depletion potential: None.
Photochemical ozone creation potential: None.
Global warming potential: None.

13. DISPOSAL CONSIDERATIONS

No harm to the environment is expected from this preparation.
Dispose of in compliance with national, regional, and local provisions that may be in force.

14. TRANSPORT INFORMATION

Hazard Class or Division: Not a hazardous substance.
For additional transport information, contact Ansell Incorporated.
No harm to the environment is expected from this preparation.

15. REGULATORY INFORMATION

Product:
EU Classification: Xn
R Phrases: 22
36/37/38
S Phrases: 26

Limit values for Exposure:
Nuisance dust limit:
OSHA TWA:
ACGIH TLV-TWA:
EINECS Status:
All components are included in EINECS inventories or are exempt from listing.
EPA TSCA Status:
All components are included in TSCA inventories or are exempt from listing.
Canadian DSL (Domestic Substances List):
All components are included in the DSL or are exempt from listing.
Environmental restrictions:
None are known.
Refer to any other national measures that may be relevant.

16. OTHER INFORMATION

(HMIS) HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS:

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<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
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<td>1</td>
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(HMIS) CANADIAN WORKPLACE HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS:

This product is rated: D2B - Product may irritate skin, eyes or mucous membranes.

Format is from directive 2001/58/EC.
EINECS data is from http://exb.jrc.it/existing-chemicals/
Data used to compile the data sheet is from Ansell Material Safety Data Sheet, March, 2003.
Toxicological information added from the EINECS ESIS (Existing Substances Information System).
A rating under WHMIS has been added, following the Canadian guidelines.

17. DISCLAIMER

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SUZHOU WUYUE SYNTHETIC CHEMICAL FACTORY SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

N/A = Not Applicable
NDA = No Data Available