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

1.1. Identification of the preparation

Product Name: "PLUS-FIFTY B"
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: ANSUL INCORPORATED
Address: One Stanton Street, Marinette, WI 54143-2542
Prepared by: Safety and Health Department
Phone: 715-735-7411
Internet/Home Page: http://www.ansul.com
Date of Issue: September, 2009

1.4. Emergency telephone

CHEMTREC 800-424-9300 or 703-527-3887

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1. Ingredient Name: Sodium Bicarbonate.
   Chemical Formula: NaHCO₃.
   CAS No.: 144-55-8.
   EINECS Number: 205-633-8.
   Concentration, Wt %: 60-75 %.
   Hazard Identification: See Heading 3.

Ingredient Name: Calcium Carbonate.
Chemical Formula: CaCO₃.
CAS No.: 471-34-1.
Concentration, Wt %: 20-30 %.
Hazard Identification: See Heading 3.

Ingredient Name: Magnesium Stearate.
Chemical Formula: (C₁₇H₃₅CO₂)₂Mg.
CAS No.: 557-04-0.
EINECS Number: 209-150-3.
Concentration, Wt %: 1-2 %.
Hazard Identification: See Heading 3.

* Ingredient Name: Blue Pigment (Hostaperm Blue).
   Chemical Formula: C₃₂H₁₆CuN₈.
   CAS No.: 147-14-8.
   EINECS Number: 205-685-1.
   Concentration, Wt %: <0.005 %.
   Hazard Identification: See Heading 3.

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].

* Product manufactured after November 2000 does not contain a blue pigment.
3. HAZARDS IDENTIFICATION

FOR HUMANS:

Product:
EU Classification: Xi Irritant.
R Phrases: 36/37/38 Irritating to eyes, respiratory system, and skin.
S Phrases: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36 Wear suitable protective clothing.

Components:
Sodium Bicarbonate.
This substance is not classified as dangerous according to Directive 1999/45/EC.
Calcium Carbonate.
EU Classification: Xi Irritant.
R Phrases: 36/37/38 Irritating to eyes, respiratory system, and skin.
S Phrases: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36 Wear suitable protective clothing.

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, IARC, 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: Not a likely route of entry. May be irritating to mucous membranes.
Ingestion: Not an expected route of entry.

Chronic Overexposure: Lungs, Gastrointestinal, and kidney can be affected.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known.

FOR ENVIRONMENT:
No adverse effects expected.

4. FIRST AID MEASURES

Eye Contact: Flush with water for a minimum of 15 minutes while holding lids open. 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, dilute by drinking large quantities of water.

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.

6. ACCIDENTAL RELEASE MEASURES

For personal protection: Prevent skin and eye contact, see Heading 8.
Clean up: Sweep up and reuse or place in a 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. 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: 15 mg/m³. ACGIH TLV-TWA: 10 mg/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. Mechanical ventilation is preferred.

8.2.1.2. Hand protection
None normally needed. Use impervious gloves if irritation occurs.

8.2.1.3. Eye protection
Chemical goggles recommended as mechanical barrier for prolonged exposure.

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: White or light blue powder.
Odor: None.

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:
– Fat solubility: Not soluble.
Partition coefficient, n-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 acids, NaK alloy, and NH₄H₂PO₄.

10.3. Hazardous decomposition products
Normally stable.
Hazardous polymerization will NOT occur.
Combustion or decomposition products include carbon dioxide.

11. TOXICOLOGICAL INFORMATION

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

Components:
- Sodium Bicarbonate:
  Oral LD50 (rat) = 4,220 mg/kg.
  Skin irritation (rabbit) = Not irritating.
  Skin irritation (human) = Slightly irritating.
  Eye irritation (rabbit) = Not irritating.
  Eye irritation (human) = Slightly irritating.
  May be irritating to mucous membranes and upper respiratory tract.
  May be harmful if swallowed in large amounts.
- Calcium Carbonate:
  Oral (rat) LD₅₀ = 6,450 mg/kg.
  Skin irritation (rabbit) = 500 mg/24 hrs; Moderate.
  Eye irritation (rabbit) = 750 μg/24 hrs; Severe.

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity
Not determined.

12.2. Mobility
Not determined.

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: Carbon dioxide from decomposition or reaction is a global warming gas.

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 Ansul Incorporated.
NO harm to the environment is expected from this preparation.
15. REGULATORY INFORMATION

Product:

EU Classification: Irritant.
R Phrases: 36/37/38 Irritating to eyes, respiratory system, and skin.
S Phrases: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36 Wear suitable protective clothing.

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

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.
Restrictions on Marketing and Use: None are known.
Refer to any other national measures that may be relevant.

16. OTHER INFORMATION

(HMIS) HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS:

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
</tr>
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<tr>
<td>1</td>
<td>0</td>
<td>0</td>
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</table>

4. Severe Hazard
3. Serious Hazard
2. Moderate Hazard
1. Slight Hazard
0. Minimal Hazard

(WHIMIS) CANADIAN WORKPLACE HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS:

This product is rated: D2B – Product may irritate eyes, skin, or mucous membrane.

Format is from directive 2001/58/EC.
EINECS data is from http://ecb.jrc.it/existing-chemicals/
Data used to compile the data sheet is from Ansl Material Safety Data Sheet, February, 2002.
The EU Classification has been changed in accordance with Directive 1999/45/EC and information in the EINECS ESIS files (Existing Substances Information System).
Toxicological information added from the EINECS ESIS (Existing Substances Information System).
A rating under WHIMIS 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. ANSUL SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

MSDS available at http://www.ansul.com