

# MSDS(Material Safety Data Sheet)

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

This material safety data sheet is applied to the processing and production of eco-friendly non-combustible flameproof coating paints produced by Hanmir Company Ltd.

- Product Name : HAF-750B
- Applicable categories: Inflammable
- Danger: Non-inflammable liquid
- Manufacturer Information :
  - Technical Institute of Hanmir Company Ltd.
  - Address: Wontongro-8, Tongjineup, Gimpo-si, Gyeonggi-do, Korea
  - TEL: +82-2-2648-0203      FAX: +82-31-982-2854

## 2. COMPONENTS AND INFORMATION

### HAF-750B

| Name             | idiom            | Cas No.    | Content (wt %) |
|------------------|------------------|------------|----------------|
| TiO <sub>2</sub> | titanium dioxide | 13463-67-7 | 6              |
| H <sub>2</sub> O | Water            | 7732-18-5  | 14             |
| PG               | Propylene Glycol | 57-55-6    | 4              |
| BYK-346          |                  | 34590-94-8 | 0.4            |
| BYK-190          |                  | 7732-18-5  | 0.9            |
| Hostaflam APP222 |                  | 68333-79-9 | 4              |
| BACTOCIDE-3300N  |                  | 111-46-6   | 0.1            |
| Hostaflam APP231 |                  | 68333-79-9 | 17.6           |
| Vanamul SR-1800  |                  | 24980-58-3 | 30.6           |
| Dipentaeristrol  |                  | 126-58-9   | 9.3            |

|                  |  |          |     |
|------------------|--|----------|-----|
| Melamine powder  |  | 108-78-1 | 12  |
| Business Secrets |  |          | 1~3 |

### 3. HAZARDSBusiness Secrets AND DANGEROUS

- a. Overview for emergency situations : Colored liquid silicate
- b. H grade (0–4 steps): Health 2, Fire -0, Reactivity -0
- c. May cause irritation in contact with skin
- d. Ingestion can cause failure to keep health. Keep well to avoid ingestion

### 4. FIRST AID TIPS

- a. When in contact with the eye, flush eyes with plenty of water or saline solution. Get medical attention if necessary
- b. When in contact with the skin, wash with a large amount of soapy water for at least 15 minutes to remove the chemical.  
Wash clothes and shoes contaminated with chemicals before using them again.If necessary, seek medical attention.
- c. When eating, do not induce vomiting. Let him drink a lot of water.  
If you take a large amount of chemicals, consult a doctor.

### 5. EXPLOSION OR FIRE–FIGHTING MEASURES

- a. Explosion upper/lower limit: Not applicable
- b. Flash Point: Not applicable
- c. Flammability: Not applicable
- d. Resistance to flame: Not applicable
- e. Legal and regulatory information by the Fire Services: Not applicable
- f. Hazardous substances that appear on the combustion: No data

## 6. ACCIDENTAL RELEASE MEASURES

- a. In case of a small leak: Move the storage container from the leakage area to a safe place. Absorb with absorbent material.
  - b. In case of a large amount of leakage: Isolate the exposed area and control access to persons other than the relevant person.
- Build and manage embankments to dispose of leakage materials.

## 7. Handling and Storage

- a. Seal and store to prevent foreign substances and non-mixing substances from being mixed.
- b. The long-term storage, it may be altered. Be sure to use a valid period. If this product will have expired, and then check for our counseling.
- c. Wear rubber gloves when handling.
- d. Store in steel, stainless steel or plastic sealed containers
- e. Use in a well-ventilated place.
- f. Do not freeze and store at a temperature above 10°C.

## 8. Exposure controls and personal protection

- a. Case of frequent use or heavy exposure, respiratory protection should be worn.
- b. Wear safety glasses to protect the eyes.
- c. Wear chemical resistant gloves to protect the hands.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- a. Appearance: White liquid
- b. Molecular: No data
- c. pH: 6
- d. Solubility: No data

- e. Boiling point: 100°C
- f. Freezing Point: 0°C
- g. Burning point: 750°C
- h. Vapor pressure: No data
- i. Specific gravity: 1.35
- j. Partition coefficient: Not available
- k. Vapor density: No data
- l. Viscosity: 115KU

## 10. STABILITY AND REACTIVITY

- a. Stable at room temperature after all reaction.
- b. Occurring when decomposing hazardous substances: None
- c. Potential hazardous polymerization: metals such as aluminum, lead, zinc, strong oxidants, strong acids, acidic salts

## 11. TOXICOLOGICAL INFORMATION

Harmless to humans

## 12. IMPACT ON THE ENVIRONMENT

Harmless to humans and the environment

## 13. DISPOSAL CONSIDERATIONS

Not applicable

## 14. TRANSPORT INFORMATION

Not classified as hazardous DOT (United States Transportation Administration) and TDG (Transportation of Dangerous Goods).

**Not Restricted IATA**

## 15. LEGAL REGULATORY INFORMATION

- a. Korea Occupational Safety and Health Act Article 38-2: Creating and keeping a Material Safety Data Sheet.

- b. Korea Occupational Safety and Health Act of exposure limits: Application of the product and the composition on exposure limits.
- c. Korea Waste Management Act: Not applicable
- d. Fire Law: 4th alcoholic beverage (hazard class 2)

## 16. OTHER INFORMATION

- a. Refer to Material Safety Data Sheet(MSDS) provided by the Korea Occupational Safety and Health.
- b. Check whether there is a revision of this MSDS is provided at the point. It is the user's responsibility according to the information and safe use conditions comply.

Thank you.