

## MATERIAL SAFETY DATA SHEET

In accordance with Annex II to Regulation (EC) No. 1907/2006 (REACH)

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 > Identification of Preparation:

**PPA 571 FS** formulated specifically for flame coating

#### 1.2 > Use of the preparation

Thermoplastic coating powders for application by fluidized bed or spray.

1.3 > **Company Identification:** U-Coat Technologies, Inc.  
2055 Lake Avenue SE #A  
Largo, FL 33771

> **Emergency Contact Number: 727-322-4005** (This number is only available during normal office hours Monday to Friday 08.30 to 17.00)

---

### 2. HAZARDS IDENTIFICATION (Directive 67/548/EEC)

These preparations are not classified as dangerous, but they can be considered as nuisance dusts. Precautions should be taken to prevent the formation of dust in concentrations above flammable, explosive or occupational exposure limits.

---

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Chemical Composition:

Blends of functionalized polyolefin including pigments and additives.

#### 3.2 > Hazardous Ingredients:

None. However the powder in air should be treated as a dust as recommended in HSE Publication EH40. Thus the "Time Weighted Average 8 hours" should be kept below 10 mg/m<sup>3</sup> of total inhalable dust, or 4 mg/m<sup>3</sup> of respirable dust.

---

### 4. FIRST AID MEASURES

4.1 **Skin Contact:** Powder should be washed off with soap and water. If molten polymer contacts skin, then cool rapidly with cold water and seek medical attention.

4.2 **Eye Contact:** Product is an inert solid, wash with water.

4.3 **Inhalation:** In case of adverse exposure to vapors formed at elevated temperatures, remove victim from exposure. Administer artificial respiration if breathing has stopped. Call for medical attention.

4.4 **Ingestion:** For accidental ingestion of small quantities first aid is not normally required. If large quantities are accidentally ingested request medical advice.

## 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing Media:

Recommended:- Low pressure systems such as foam (AFFF), powder, or water spray or water mist.  
Not to be used:- High pressure systems such as inert gas or water jets.  
High pressure systems could cause formation of dust clouds and hence dust explosions.

### 5.2 ➤ Exposure Hazards:

Combustion products may include carbon monoxide, carbon dioxide, hydrocarbons, aldehydes, ketones, organic acids, smoke and fumes.

### 5.3 Protective Equipment for fire-fighters:

For large fires breathing apparatus is required.

---

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal Precautions:

If spillage is large and dust levels are high dust masks should be worn, and in enclosed spaces take precautions against dust explosion hazards. (See 9.2).

### 6.2 Environmental Precautions:

No hazard involved but since powder floats in water and is unsightly prevent from entering water courses.

### 6.3 Method of Cleaning Up:

Vacuum up dust. Use of brushes may cause dust cloud formations and potential dust explosion. (See 9.2).

---

## 7. HANDLING AND STORAGE

### 7.1 ➤ Precautions During Handling:

When emptying bags avoid dust cloud formation and/or static build up to prevent potential dust explosion. In case of large amounts of dust, wear respiratory protection.  
During processing provide adequate local exhaust ventilation.

### 7.2 Storage:

In well ventilated dry area.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Exposure Controls:

Local exhaust ventilation for process fumes. Dust masks if environment is dusty.

### 8.2 Special Protective Measures:

**Respiratory:** If dusty wear dust masks. If local exhaust ventilation is inadequate wear fume mask.  
**Hands:** During processing heat resistant gloves should be worn.  
**Eyes:** Not normally necessary but if very dusty wear tight fitting safety goggles.  
**Skin:** The skin should be covered to avoid burns from hot metal before and after coating.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Physical State:

9.1.1	Physical State:	White or colored powder
9.1.2	Odor:	Waxy
9.1.3	Specific Gravity:	0.94 - 0.98
9.1.4	Melting Point:	90 - 130°C
9.1.5	Boiling Point:	Not relevant
9.1.6	Solubility in Water:	Not soluble
9.1.7	Vapour Pressure:	Not relevant
9.1.8	Flammability:	Only flammable at high temperatures (see 10.1)

### 9.2 Dust Explosion Data\*:

9.2.1	Maximum Explosion Pressure:	6.2 bar g
9.2.2	K <sub>st</sub> Value:	40-60 bar.m.s <sup>-1</sup>
9.2.3	St Class:	1
9.2.4	Minimum Ignition Energy:	100 - 500 mJ
9.2.5	Minimum Ignition Temperature:	300 to 400°C
9.2.6	Minimum Explosive Concentration (MEC)	PPA 571ES, PPA 673ES, PPA 571HES - 140 g/m <sup>3</sup> U-FS 571, U-FS 571H, U-FS 571FS, Easy flow - 200 g/m <sup>3</sup>

\*These figures are based on tests performed on similar products]

---

## 10. STABILITY AND REACTIVITY

### 10.1 ► Conditions to Avoid:

Avoid prolonged exposure to temperatures in excess of 300°C  
Stable under normal storage and handling conditions.

### 10.2 Material to Avoid:

Strong oxidizing agents.

### 10.3 Thermal Decomposition - Combustion:

Carbon dioxide, carbon monoxide, paraffin's, ketones and aldehydes.

### 10.4 Thermal Decomposition - Processing:

Fumes contain low molecular weight aliphatic hydrocarbons, and traces of ditertiary butyl phenol and stearic Acid esters.

---

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Ingestion:

Relatively inert should therefore produce no significant toxic response.

### 11.2 Skin Contact:

May cause irritation if caught between skin and clothing. Molten polymer will cause burns.

### 11.3 Eye Contact:

Like any inert dust will cause irritation.

### 11.4 Inhalation:

Processing fumes may cause irritation. See 10.4 Excessive dust may cause irritation to the respiratory tract, see 2.2.

## 12. ECOLOGICAL INFORMATION

### 12.1 Environmental Effect:

The powder will float on water and is unsightly. It will have no other effect on the environment.

---

## 13. DISPOSAL CONSIDERATION

### 13.1 Disposal of Product:

Incineration or landfill.

### 13.2 Disposal of Packaging:

Pallets are recyclable. Cardboard boxes can be recycled, incinerated or used for landfill. The inner liners and shrink wrap can be incinerated or used for landfill.

---

## 14. TRANSPORT

14.1 No hazards so no special precautions are required.

---

## 15. REGULATORY INFORMATION

### 15.1 Risk Phrases:

- Section 355 (Extremely hazardous substances)  
None of the ingredients is listed
- Section 313 (Specific toxic chemicals listing)  
None of the ingredients is listed
- TSCA (Toxic Chemicals Control Act)  
All ingredients are listed
- Proposition 65 (Chemicals known to cause cancer)  
None of the ingredients is listed
- Chemicals known to cause reproductive toxicity for females  
None of the ingredients is listed
- Chemicals known to cause reproductive toxicity for males  
None of the ingredients is listed
- Chemicals known to cause developmental toxicity  
None of the ingredients is listed
- **Carcinogenic Categories**
- EPA (Environment protection agency)  
None of the ingredients is listed
- TLV (threshold limit values)  
None of the ingredients is listed
- NIOSH-Ca (National Institute for Occupational Safety and Health)  
None of the ingredients is listed
- OSHA-Ca (Occupational Safety and Health Administration)  
None of the ingredients is listed

### 15.2 ➤ Safety Phrases:

- |                  |  |
|------------------|--|
| <b>S22</b>       | Do not breathe dust  |
| <b>S33</b>       | Take precautionary measures against static discharge                     |
| <b>S36/37/39</b> | Wear suitable protective clothing, gloves, and eye/face protection       |
| <b>S38</b>       | In case of insufficient ventilation, wear suitable respiratory equipment |
-

## 16. OTHER INFORMATION

The information presented here is given in good faith and to the best of our knowledge, true and accurate. This information may be subject to modification from time to time in the light of: legislation, our experience and our policy of continuous development. It is the user's responsibility to verify that they are using the latest issue of the SDS in conjunction with the latest copy of our Technical Data Sheet. Conditions under which our materials may be used are beyond our control. Hence, no responsibility or liability, expressed or implied, can be accepted by U-Coat for any problems which may arise as a result of any actions or decisions that may be taken by the coating applicator, or by any other party that may be involved with specifying or using the material.

