# **MATERIAL SAFETY DATA SHEET**

#### (According to ISO 11014 format)

Revised date : 2014.07.05

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name : POLYAMIDE RESIN SP92-180-A AMBER (HT-85, AMBER) Chemical name : Polymerized Fatty Acid Based Polyamide Resin Company name : Moldman Systems, LLC. 4649 Aircenter Circle, Reno, NV. 89502

Emergency telephone : 886-7-6962211-3

### 2. COMPOSMON/INFORMATION ON INGREDIENTS

Ingredients	%	CAS NO.
Polyamide	100	68552-14-7

### 3. HAZARDS IDENTIFICATION

- (a). Emergency overview. : Amber solid with a mild amine odor, in bead form.
- (b). Safety hazards: Vapor of the molten resin will irritates eyes, nose and throat. Be careful not to involved in a burn accident by molten resin. Prolonged or repeated contact may cause mild irritation.

### 4. FIRST-AID MEASURES

(a).Symptoms and effects (b).Inhalation	<ul><li>: Vapor of the molten resin will irritates eyes, nose and throat.</li><li>: Remove to fresh air if effects occur from inhalation of molten</li></ul>
(c). Skin contamination	<ul><li>resin vapor or fumes, or resin dust.</li><li>At the end of each work shift, wash skin with plenty of water</li></ul>
(d). Eye contamination	<ul><li>and soap.</li><li>In case of contact, immediately flush eyes with plenty of water.</li></ul>
(e). Ingestion	: Emergency care should not be needed.

# 5. FIRE-FIGHTING MEASURES

(a).Suitable extinguishing medi	a : Water fog, foam, carbon dioxide or dry chemical.
(b).Special precautions	: Toxic gases(carbon monoxide)may be released during fire.
(c).Protective equipment	: Positive-pressure, self-contained breathing apparatus and full protective clothing.

### 6. ACCIDENTAL RELEASE MEASURES

In a clean area, recover for reuse. Dispose of contaminated material.

# 7. HANDLING AND STORAGE

- (a). Handing : When handing molten resin, use adequate ventilation to avoid the accumulation of fumes. Use good housekeeping to prevent dust accumulation. Avoid contact with eyes, skin , and clothing. Wash thoroughly after handing.
- (b). Storage : Place or lay the bag in or on a well-grounded transfer container or chute. Before transferring the contents via the grounded container or chute to a receiver containing the flammable or combustible substance/ mixture, make sure that the transfer container or chute and receiver have a good common ground.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

(a). Inhalation protection : Solid resin - For normal operation, no respiratory protection is required. A dust mask is recommended if resin dust is becomes airborne.
Molten resin - An air purifying respirator designed for organic vapors should provide adequate protection.
(b). Eye protection : Solid resin - Use safety glasses. An eyewash is recommended. Molten resin - Use chemical safety goggles. An eyewash is recommended.
<ul> <li>(c). Skin protection</li> <li>: Solid resin - As good industrial hygiene practice, impervious (for example, nitrile) gloves are recommended. Molten resin - Heat-resistance gloves and other protective clothing should be worn to prevent body contact. A safety shower is recommended.</li> </ul>
(d).Engineering controls : Use adequate ventilation. In process operations capable of generating static electricity and /or dust clouds ; grounding, venting, and explosion relief provisions must be used.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/ state	:	Amber pellet solid.
Odor	:	Mild amine.
Boiling point / boiling range	:	-
Softening Point (RING&BALL)	:	177~195°C
PH	:	-
Specific gravity	:	-
Solubility	:	soluble in aromatic and alcohol type co-solvent

## **10. STABILITY AND REACTIVITY**

- (a). Chemical stability : Stable .
- (b). Condition to avoid : Formation of dust clouds. This product is not reactive with water
- (c). Chemicals to avoid : None known.
- (d). Hazardous polymerization : Will not occur under normal condition.
- (e). Hazardous decomposition products : Include toxic oxides of carbon.

# 11. TOXICOLOGICAL INFORMATION

The product is not on the International Agency for Research on Cancer(IARC) or National Toxicology Program(NTP) or OSHA lists of carcinogens or potential carcinogens.

OTHER : Molten resin can cause thermal burns.

## 12. ECOLOGICAL INFORMATION

There is no date available for this product.

# 13. DISPOSAL CONSIDERATIONS

Dispose of waste by landfill or incineration in accordance with all local, state, and federal Regulations.

## 14. TRANSPORT INFORMATION

DOT- Department of Transportation Hazardous Materials Regulations.

DOT Hazard Class: Not applicable.DOT Proper Shipping Name: Not applicable.DOT Identification Number: Not applicable.

# 15. REGULATORY INFORMATION

Not applicable.

## 16. OTHER INFORMATION

None.

To the best of our knowledge, the information contained in this sheet is correct. However, we do not take responsibility or liability or any consequences arising from its use.