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#### SAFETY DATA SHEET

# 1. IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/ UNDERTAKING

**Product Name** Thermoplastic Polyurethane Resin

Product IDN/ Trade Name TPU-P-6

Material Uses DTF Adhesive

<u>Manufacturer</u> STS Inks LLC., 8300 Congress Ave., Boca Raton, FL 33487, USA

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www.stsinks.com

**Date Issued** March 22, 2023

## 2. HAZARD IDENTIFICATION

#### 2.1 General Chemical Description

White powder with thermoplasicity that can be heated/ plasticized and bonded.

#### 2.2 Health Effects

Non-hazardous at room temperature, non-hazardous to health.

#### 2.3 Environmental Impact

No effect

## 2.4 Physical and Chemical Hazards

Becomes molten at high temperatures and can burn skin.

## 2.5 Special Hazards

None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 General Chemical Description

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White powder, with thermoplasticity, can be repeatedly heated and plasticized and bonded.

Components	CAS-Number
Polyurethane	9009-54-5

## 4. FIRST AID MEASURES

## 4.1 Description of necessary first-aid measures

**Inhalation** If inhaled move to fresh air. Respiratory irritation may occur, if symptoms

develop seek medical attention. If not breathing, give artificial respiration

preferably mouth to mouth.

**Ingestion** Discharged immediately induce vomiting and immediately seek medical

attention. Never give anything by mouth to an unconscious person.

**Skin Contact** No harm at room temperature, if discomfort, wash with soap or water. If

the molten state at a high temperature and exposure to the substance is

used to cool the ice or flowing water, and timely medical treatment

**Eye Contact** Do not rub eyes. In case of contact, immediately flush eyes with plenty of

water for at least 15 minutes. Seek medical attention immediately.

## 4.2 Most important symptoms or effects, and any symptoms that are acute or delayed

**Eye Contact:** No known significant effects or critical hazards. **Inhalation:** No known significant effects or critical hazards. **Skin Contact:** No known significant effects or critical hazards. **Ingestion:** No known significant effects or critical hazards.

#### **Over Exposure Signs/Symptoms**

Eye Contact: No specific data.
Inhalation: No specific data.
Skin Contact: No specific data.
Ingestion: No specific data.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

#### **5.1 Extinguishing Media**

<u>Suitable Extinguishing Media:</u> Small fires: dry powder fire extinguishers, carbon dioxide fire extinguishers, foam fire extinguishers.

Big fires: spray, fog or regular foam fire extinguishers.

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<u>Unsuitable Extinguishing Media:</u> Do not use direct current fire extinguishers.

## 5.2 Special Hazards arising from the substance or mixture

Decomposition Non-toxic fumes under fire conditions (Due to different personal physical condition, may produce discomfort)

## **5.3 Advice for Fire-Fighters**

Firefighters should wear positive pressure self-contained breathing apparatus; it should be equipped with protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

No harm at normal temperature, high temperature molten beware of burns.

#### **6.2 Environmental Precautions**

Prevent the inflow pipes or ditches.

#### 6.3 Methods and materials for containment and cleaning up

After heating alcohol scrub.

#### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Handling** Require the installation of local ventilation equipment. As the

case may be, to wear protective masks, eye, gloves.

**7.2 Conditions for safe storage** 1. temperature 20-30 °C, humidity 45-55%, non-UV light

exposure, dark (blackout include: lighting, natural light), avoid

prolonged air contacts.

2. The stacking strength of materials should not be too large,

and the stacking height should be moderate.

3. Keep the original packaging; if there is no good packaging, the excess materials should be consumed within one day as much

as possible.

**7.3 Specific end uses** Direct to Film application.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters:

**Components with workplace control parameters** 

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Not specified.

#### **8.2 Exposure controls:**

## **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## **Personal Protective Equipment**

#### **Respiratory Protection**

Not applicable

#### **Hand Protection**

Heating process using gloves for protection.

#### **Skin Protection**

Not applicable.

#### **Eye/face Protection**

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

ColorWhiteOdorSlight

**Boiling Point/boiling range**No Data Available

Melting Point/melting range80-95 °CFreezing PointNot applicableSpecific GravityNot applicableVapor DensityNot applicableVapor PressureUndeterminedRelative Density1.20±0.02 g/cm³

Water Solubility
Viscosity
pH
Not applicable
Flash Point
Auto-Ignition Temperature

Insoluble
Not applicable
Not applicable
Not applicable

Flammable Limits

Volatility (w/w)

VOCs

No Data Available

No Data Available

No Data Available

No Data Available

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The physical and chemical data given in Section 9 are typical values for this product and are not intended to be product specifications.

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity** No data available

**10.2 Chemical Stability** This product is stable under recommended conditions of

storage and use.

10.3 Possibility of hazardous

**reactions** No data available

**10.4 Conditions to avoid**Do not put wet or in direct sunlight.

**10.5 Materials to avoid** Sunlight, Water, Fire

10.6 Hazardous decomposition

products

None

## 11. TOXICOLOGICAL INFORMATION

11.1 Routes of Overexposure None

11.2 Health Hazards:

**Acute Health Hazards** None

**Chronic Health Hazards** None

**Mutagenicity** Not a suspected mutagen.

**Carcinogenicity** None

11.3 Toxicity:

**Acute Toxicity Data** None

**Inhalation** None

**Irritating** None

**Sensitization** None

**Reproductive Toxicity** None

## 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This product does not harm the environment.

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**12.2 Fluidity** 25±8 g/10min (ASTM D1238-04)

**12.3 Persistence and Degradability** None

**12.4 Bioaccumulative Potential** None

**12.5 Results of PBT and vPvB Assessment** PBT: Not applicable

vPvB: Not applicable

**12.6 Other Adverse Effects**No data available

## 13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

**Product** It can be regarded as non-toxic plastic waste, can be recycled

or discarded according to local government laws.

**Contaminated Packaging** Dispose of as unused product

#### 14. TRANSPORTATION INFORMATION

Not classified as a dangerous good under transport regulations

14.1 UN NumberNot Regulated14.2 UN Proper Shipping NameNot Regulated14.3 Transport Hazard Class(es)Not Regulated14.4 Packaging GroupNot Regulated14.5 Environmental HazardsNot Regulated

**14.6 Special Precautions for User**Transport and storage of the product in

accordance with general precautions and

instructions mentioned in this SDS.

## 15. REGULATORY INFORMATION

**U.S Federal Regulations OSHA** : Not available.

: This product is classified non-hazardous

**Applicable Regulations** : No reference material

## **16. OTHER INFORMATION**

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