



SAFETY DATA SHEET

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

<u>Product Name</u>	TPU
<u>Product IDN</u>	TPUP5
<u>Material Uses</u>	DTF Adhesive
<u>Manufacturer</u>	STS Inks LLC., 8300 Congress Ave., Boca Raton, FL 33487, USA Phone: 561-999-8818 Fax: 561-999-8828 Emergency: 561-419-7111 www.stsinks.com
<u>Date Issued</u>	December 22, 2022

2. HAZARD IDENTIFICATION

2.1 General Chemical Description

White powder with thermoplasticity 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

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

Suitable Extinguishing Media: Small fires: dry powder fire extinguishers, carbon dioxide fire extinguishers, foam fire extinguishers.

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

Unsuitable Extinguishing Media: 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

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

Color	White
Odor	Tasteless
Boiling Point/boiling range	No Data Available
Melting Point/melting range	80-95 °C
Freezing Point	Not applicable
Specific Gravity	Not applicable
Vapor Density	Not applicable
Vapor Pressure	Undetermined
Relative Density	1.20±0.02 g/cm ³
Water Solubility	Insoluble
Viscosity	Not applicable
pH	Not applicable
Flash Point	Not applicable
Auto-Ignition Temperature	Not applicable
Flammable Limits	It will not cause a fire
Volatility (w/w)	No Data Available
VOCs	No Data Available
Oxidizing Properties	No Data Available

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 Number	Not Regulated
14.2 UN Proper Shipping Name	Not Regulated
14.3 Transport Hazard Class(es)	Not Regulated
14.4 Packaging Group	Not Regulated
14.5 Environmental Hazards	Not 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

The information in this Safety Data Sheet (SDS) is believed to be correct to the best of our knowledge, information and belief at the date of its publication. The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained. STS inks does not warrant the completeness or accuracy of the information contained herein.

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