

Material Safety Data Sheet

1. Product and company identification

Product name : PolySupport™

Manufacturer : JF Polymers (Suzhou) Co. Ltd.

Haicheng Industrial Park, Building 7,

Changshu Economic and Technological Zone, Changshu, Suzhou, Jiangsu Province, 215513, China

Tel/Fax: +86-512-52096516 / +86-512-52096512

Emergency telephone number: +86-512-52096516; or call LOCAL POISON CONTROL CENTER

2. Hazards identification

Physical state: Solid. [Filaments.]

OSHA/HCS status: This material is classified as NON-hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview : Caution!

During handling and use, product can cause static discharge. In the presence of flammable materials a fire and/or explosion may occur. Molten material may cause thermal eye burns. Molten material may cause thermal skin burns. Processing vapors may cause respiratory tract irritation.

Irritating to eyes, respiratory system and skin. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

GENERAL INFORMATION: Read the entire MSDS for a more thorough evaluation of the hazards.

3. Composition/information on ingredients

Name	CAS number	%
Thermoplastic Polyurethane	Proprietary	60.0%100.0%
PLA	9051-89-2	0.0%-40%

4. First aid measures

Eye contact : Particles or fibers may cause slight discomfort similar to getting dust in the eye. Remove particles by irrigating with eye wash solution or clean water, holding the eyelids apart. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Skin contact : Molten material can cause severe burns. Do NOT try to peel molten polymer from the skin. Cool rapidly with water. Wash with soap and water. Get medical attention if symptoms occur.



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Inhalation Move exposed person to fresh air. Keep person warm and at rest. Get medical attention if symptoms occur. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person.

Notes to physician: Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

5 . Fire-fighting measures

Flash point: Not applicable.

Products of combustion: Unlikely under normal industrial use. If the product is heated to temperatures excessively higher than those recommended on the technical data sheet, thermal decomposition is possible. Combustion products may include: carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂ etc.), hydrocarbons, HCN

Extinguishing media

Suitable: SMALL FIRE: Use dry chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Not suitable: None known.

Special exposure hazards: No specific hazard.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special remarks on fire hazards : During a fire, irritating and highly toxic gases may be generated during combustion or decomposition. Transferring dry pellets or granules between containers or charging into solvents can cause a build-up of static electricity which can be sufficient to cause fires and /or explosions in the presence of flammable materials. Equipment should provide a means of dissipating any charges that may develop
Water spray should be used to cool containers.

6 . Accidental release measures

Personal precautions : Lab coat. Impervious gloves. Safety glasses with side shields.

Environmental precautions : Collect product for recovery or disposal. Notify applicable government authority if release is reportable or could adversely affect the environment.

Methods for cleaning up : If emergency personnel are unavailable, carefully scoop up spilled materials and use a non-sparking or explosion-proof means to transfer material to an appropriate container for disposal by incineration.

7 . Handling and storage

Handling: Use normal good industrial hygiene and housekeeping practices. Take precautionary measures against static discharges. Take precautionary measures against static discharges

Storage: Store in a cool, dry, well-ventilated area. Keep away from heat, sparks and flames. Keep containers closed. Avoid moisture contamination. Transferring dry pellets or granules between containers or charging into solvents can cause a build-up of static electricity which can be sufficient to cause fires and/or explosions in the presence of flammable materials. Equipment should provide a means of dissipating any charges that may develop.

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8 . Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Preventive Measures: Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Engineering controls: Use local exhaust ventilation to maintain airborne concentrations below the TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it. For guidance on engineering control measures refer to publications such as the ACGIH current edition of 'Industrial Ventilation, a manual of Recommended Practice.'

Personal protection

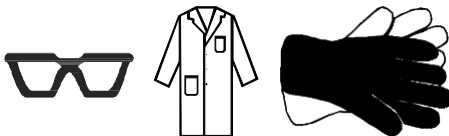
Eyes: safety glasses with side-shields

Skin: lab coat

Respiratory: Wear appropriate respirator when ventilation is inadequate.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Personal protective equipment (Pictograms) :



9 . Physical and chemical properties

General information

Appearance

Physical state: Solid. [Filaments.]

Color: White.

Odor: Almost Odorless.

Odor threshold: Not available.

Important health, safety and environmental information

pH: Not available.

Boiling point: Not available.

Melting point: Not available.

Flash point: Not applicable.

Oxidizing properties: Not available.

Relative density: Not available.

Vapor density: Not available.

VOC content: Not available.

10 . Stability and reactivity

Stability and reactivity: The product is stable.

Hazardous: Will not occur.

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polymerization Hazardous

decomposition products: Unlikely under normal industrial use. If the product is heated to temperatures excessively higher than those recommended on the technical data sheet, thermal decomposition is possible. Combustion products may include: carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂ etc.), hydrocarbons, HCN

11 . Toxicological information

Potential acute health effects

Ingestion: Not hazardous in normal industrial use.

Inhalation: Non-irritating to the respiratory system.

Eyes: May cause physical abrasion in contact with eyes. Molten polymer will cause serious burns to the eyes.

Skin: Non-irritating. Molten polymer will adhere to skin causing deep thermal burns.

Potential chronic health effects

Target organs: None known.

Carcinogenicity: The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP.

Mutagenicity: There is no substantial evidence of mutagenic potential.

Teratogenicity: No information is available and no adverse teratogenic/embryotoxic effects are anticipated. No adverse reproductive effects are anticipated.

Fertility effects: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

12 . Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Not available			

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Not available			

Environmental effects : No known significant effects or critical hazards.

13 . Disposal considerations

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

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14 . Transport information

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
DOT Classification	Not regulated.					-
TDG Classification	Not regulated.					-
IMDG Class	Not regulated		-	-		-
IATA-DGR Class	Not regulated		-	-		-

PG*: Packing group

The transport regulations may change in the different countries. Check for the appropriate regulations in the country of transport or usage of this product.

15 . Regulatory information

United States

HCS Classification: Not regulated.

U.S. Federal regulations: United States inventory (TSCA 8b): All components are listed or exempted.

CERCLA: Hazardous substances: No ingredients listed.

SARA 313: No ingredients listed.

This product does not contain nor is it manufactured with ozone depleting substances.

California Prop 65:

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Canada

WHMIS (Canada) : Not a WHMIS controlled material.

CEPA (DSL): All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the CPR (Controlled Products Regulations) and this MSDS (Material Safety Data Sheet) contains all the information required by the CPR.

16 . Other information

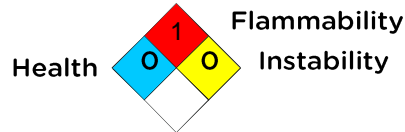
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Hazardous Material:
 Information System (U.S.A.)

Health	0
Fire hazard	1
Reactivity	0

National Fire Protection :
 Association (U.S.A.)



Notice to reader

While the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE. IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE. THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

