

**Centre Testing International Group****S D S****Report Number : SD220001786210102****Applicant : Shanghai Shengjun Polymer Technologies  
Co. Ltd.****Address : Room K, No. 179 west Zhongshan Road,  
Changning District, Shanghai, China****Sample Name : Polyimide SJ-115****Compiled by : Rain Wan****Inspected by : Katherine Ren****Issue date : Jan.19, 2020**

## Safety Data Sheet

# Polyimide SJ-115

Version: V1.0.0.1

Report No.: SD220001786210102

Creation Date: 2020/01/19

Revision Date: 2020/01/19

\*Prepared according to American OSHA HazCom Standard (2012)

## 1 Identification of the chemical and supplier

### Product identifier

Product Name	Polyimide SJ-115
Common Name/Trade Name	PI
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable

### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Processing of semi-finished products, machined parts.
Uses advised against	None.

### Details of the supplier of the Safety Data Sheet

Name of the company	Shanghai Shengjun Polymer Technologies Co. Ltd.
Address of the company	Room K, No. 179 west Zhongshan Road, Changning District, Shanghai, China
Post code	—
Telephone number	+86-21-52731817
Fax number	+86-21-52732366
E-mail address	shenjun_tt@hotmail.com

### Emergency phone number

Emergency phone number	+86-21-52731817
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## 2 Hazards identification

### Hazard classification according to GHS

Hazard classification according to GHS	Not applicable
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### Label elements

Hazard pictograms	Not applicable
Signal word	Not applicable

### Hazard statements

Hazard statements	Not applicable
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## | Precautionary statements

### ◆ Prevention

<b>Prevention</b>	Not applicable
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### ◆ Response

<b>Response</b>	Not applicable
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### ◆ Storage

<b>Storage</b>	Not applicable
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### ◆ Disposal

<b>Disposal</b>	Not applicable
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## | Other hazards

	Not applicable
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## | Hazard description

### ◆ Physical and chemical hazards

	Solid, insoluble in water.
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### ◆ Health hazards

<b>Inhaled</b>	Inhalation of the product may produce adverse health effects or irritation of the respiratory tract following discomfort.
<b>Ingestion</b>	Accidental ingestion of the product may be harmful to the health of the individual.
<b>Skin Contact</b>	Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
<b>Eye</b>	This product may cause temporary discomfort following direct contact with the eye.

### ◆ Environmental hazards

	Please refer to 12th chapter of SDS.
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## 3 Composition/information on ingredients

Component	Cas No.	EC No.	Concentration (weight percent, %)
Polyimide	497926-97-3	691-837-6	85
Graphite	7782-42-5	231-955-3	15

## 4 First aid measures

### | Description of first aid measures

<b>General advice</b>	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
<b>Skin contact</b>	Take off contaminated clothing and shoes immediately. Wash off with plenty of water and consult a physician if feel uncomfortable.
<b>Ingestion</b>	Call a physician immediately.

Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen and consult a physician immediately.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

### | Most important symptoms and effects, both acute and delayed

1	Cumulative effects may result following exposure.
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### | Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

## 5 Firefighting measures

### | Extinguishing media

Suitable extinguishing media	Use extinguishing media suitable for surrounding area.
Unsuitable extinguishing media	There is no restriction on the type of extinguisher which may be used.

### | Specific hazards arising from the substance or mixture

1	Not considered a significant fire risk, however containers may burn.
2	Development of hazardous combustion gases or vapor possible in the event of fire.

### | Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

## 6 Accidental release measures

### | Personal precautions, protective equipment and emergency procedures

1	Ensure adequate ventilation. Remove all sources of ignition.
2	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
3	Use personal protective equipment. Avoid breathing mist or dust.

### | Environmental precautions

1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.

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

1	Use clean, non-sparking tools to collect absorbed material.
2	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
3	Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

## 7 Handling and storage

### | Precautions for handling

1	Handling is performed in a well ventilated place.
2	Wear suitable protective equipment.
3	Avoid contact with eyes.
4	Keep away from heat/sparks/open flames/ hot surfaces.

### | Precautions for storage

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

## 8 Exposure controls/personal protection

### | Control parameters

#### ◆ Occupational Exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Graphite 7782-42-5	USA - OSHA	-	15	-	-
	South Korea	-	2	-	-
	Ireland	-	10	-	-
	Germany (DFG)	-	4	-	-
	Denmark	-	2.5	-	5
	Australia	-	3 (4)	-	-

#### ◆ Biological limit values

<b>Biological limit values</b>	No relevant regulations
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#### ◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air (Series standard) .

### | Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Set up emergency exit and necessary risk-elimination area.
4	Handle in accordance with good industrial hygiene and safety practice.

### | Personal protection equipment

General requirement	
Eye protection	Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US)).
Hand protection	Wear protective gloves (such as butyl rubber), passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.
Respiratory protection	In general situation, respiratory protection is not needed. If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Skin and body protection	Wear chemical protective clothing.

## 9 Physical and chemical properties

### | Physical and chemical properties

Appearance	Dark green powder
Odor	Odorless
Odor threshold	No information available
pH	No information available
Melting point/freezing point(°C)	>300
Initial boiling point and boiling range(°C)	No information available
Flash point(Closed cup, °C)	Not applicable
Evaporation rate	Not applicable
Flammability	Not combustible
Upper/lower explosive limits[% (v/v)]	Upper limit: Not combustible; Lower limit: Not combustible
Vapor pressure	Not applicable
Vapor density(Air=1)	Not applicable
Relative density(Water=1)	1.5
Solubility(mg/L)	Insoluble in water
n-octanol/water partition coefficient	No information available
Auto-ignition temperature(°C)	No information available
Decomposition temperature(°C)	No information available
Viscosity(mm <sup>2</sup> /s)	Not applicable

## 10 Stability and reactivity

### | Stability and reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous	Mixtures with metallic acetylene, when heated, cause a fire or incandescence.

reactions	
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	Metal acetylide, halogen, interhalogen, halogen oxides, nitric acid, nitrous oxide, nitrates, nitrites, halogen oxyacid salts, chromates, permanganates, inorganic peroxides, metal oxides and peroxyformic acid.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 Toxicological information

### | Acute toxicity

Acute toxicity	No information available
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### | Carcinogenicity

ID	Cas No.	Component	IARC	NTP
1	497926-97-3	Polyimide	Not Listed	Not Listed
2	7782-42-5	Graphite	Not Listed	Not Listed

### | Others

Polyimide SJ-115	
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Reproductive toxicity(additional)	Based on available data, the classification criteria are not met

## 12 Ecological information

### | Acute aquatic toxicity

Acute aquatic toxicity	No information available
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### | Chronic aquatic toxicity

Chronic aquatic toxicity	No information available
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### | Persistence and degradability

Component	Cas No.	Persistence (water/soil)	Persistence (air)
Graphite	7782-42-5	Low	Low

### | Bioaccumulative potential

Component	Cas No.	Bioaccumulative potential	comments
Graphite	7782-42-5	Low	Log K <sub>ow</sub> =0.5294

**| Mobility in soil**

Component	Cas No.	Mobility in soil	Soil Organic Carbon-Water Partitioning Coefficient (K <sub>oc</sub> )
Graphite	7782-42-5	Low	23.74

**| Results of PBT and vPvB assessment**

Component	Cas No.	Results of PBT and vPvB assessment (according to (EC) No 1907/2006)
Polyimide	497926-97-3	not PBT/vPvB
Graphite	7782-42-5	not PBT/vPvB

**13 Disposal considerations**

**| Disposal considerations**

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section 13.1 and 13.2.

**14 Transport information**

**| Label and Mark**

Transporting Label	
Marine pollutant	None

**| IMDG-CODE**

UN number	3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Transport hazard class	9
Transport subsidiary hazard class	None
Packing group	III
Special provisions	274 335 966 967 969
Limited quantities	5kg
Excepted quantities	E1
Marine pollutant (Yes or no)	No
EmS No.	F-A,S-F



**| ICAO/IATA-DGR**

UN number	3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S.
Transport hazard class	9
Transport subsidiary hazard class	None
Packing group	III
Excepted quantities	E1
Passenger and Cargo Aircraft Limited Quantity Packing Instructions	Y956
Passenger and Cargo Aircraft Limited Quantity Maxium net Quantity per Package	30 kg G
Passenger and Cargo Aircraft Packing Instructions	956
Passenger and Cargo Aircraft Maxium net Quantity per Package	400 kg
Cargo Aircraft Packing Instructions	956
Cargo Aircraft Maxium net Quantity per Package	400 kg
Special provisions	A97、 A158、 A179、 A197
ERG code	9L

**| UN-ADR**

UN number	3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S.
Transport hazard class	9
Transport subsidiary hazard class	None
Packing group	III
Special provisions	274 335 375 601
Limited quantities	5 kg
Excepted quantities	E1
Packing instructions	P002 IBC08 LP02 R001
Special packing provisions	PP12 B3
Mixed packing provisions	MP10
Protoble tanks and bulk containers instructions	T1 BK1 BK2
Protoble tanks and bulk containers special provisions	TP33
ADR tank code	SGAV LGBV

ADR tank special provisions	-
Vehicle for tank carriage	AT
Transport category(Tunnel restriction code)	3 (E)
Special provisions for carriage(Packages)	V13
Special provisions for carriage(Bulk)	VC1 VC2
Special provisions for carriage>Loading, unloading and handling)	CV13
Special provisions for carriage(Operation)	-
Hazard identification No.	90
Notes	-

## 15 Regulatory information

### | International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Polyimide	×	×	×	×	√	×	×	√	×
Graphite	√	√	√	√	√	√	√	√	√

【EINECS】 European Inventory of Existing Commercial Chemical Substances

【TSCA】 United States Toxic Substances Control Act Inventory

【DSL】 Canadian Domestic Substances List

【IECSC】 China Inventory of Existing Chemical Substances

【NZIoC】 New Zealand Inventory of Chemicals

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances

【KECI】 Existing and Evaluated Chemical Substances

【AICS】 Australia Inventory of Chemical Substances

【ENCS】 Existing And New Chemical Substances

Note

“√” Indicates that the substance included in the regulations

“×” That no data or included in the regulations

## 16 Others

### | Information on revision

Creation Date	2020/01/19
Revision Date	2020/01/19
Reason for revision	-

### | Reference

[1]IPCS: The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>.

[2]IARC, website: <http://www.iarc.fr/>.

[3]OECD: The Global Portal to Information on Chemical Substances, website:

[http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en).

[4]CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.

[5]NLM: ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.

[6]EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.

[7]U.S. Department of Transportation: ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.

[8]Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

## | Abbreviations and acronyms

**CAS** –Chemical Abstracts Service

**CMR** - Carcinogens, mutagens or substances toxic to reproduction

**PC-STEL**- Short term exposure limit

**PC-TWA** - Time Weighted Average

**DNEL** - Derived No Effect Level

**IARC** - International Agency for Research on Cancer

**RPE** - Respiratory Protective Equipment

**PNEC** –Predicted No Effect Concentration

**LC<sub>50</sub>** - Lethal Concentration 50%

**LD<sub>50</sub>** - Lethal Dose 50%

**NOEC** -No Observed Effect Concentration

**EC<sub>50</sub>** - Effective Concentration 50%

**PBT** - Persistent, Bioaccumulative, Toxic

**POW** - Partition coefficient Octanol: Water

**BCF** - Bioconcentration factor (BCF)

**vPvB** - very Persistent, very Bioaccumulative

**IMDG**-International Maritime Dangerous Goods

**ICAO/IATA**-International Civil Aviation Organization/International Air Transportation Association

**UN**-The United Nations

**ACGIH**-American Conference of Governmental Industrial Hygienists

**NFPA**-National Fire Protection Association

**OECD**-Organization for Economic Co-operation and Development

## | Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. The information of section 3 and section 9 is provided by: Shanghai Shengjun Polymer Technologies Co. Ltd. Other information is from authoritative database and expert assessment(20K5Z8).

## | Disclaimer

This Safety Data Sheet (SDS) was prepared according to OSHA HazCom Standard (2012). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

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