Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: CSSS-TCO-010-155253



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form Substance Substance name PolySupport[™]

Additional identification Nanoform is NOT covered by this SDS.

CAS-No. 9009-54-5

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : 3D printing materials.

1.2.2. Uses advised against

Restrictions on use : Not available

1.3. Details of the supplier of the safety data sheet

JF Polymers(Suzhou) Co., Ltd.

Building C and Building G, No. 15, Dianchang Road, Bixi Street, Changshu City, Suzhou City, Jiangsu Province

T+86-512-52058005 - F+86-512-52096516

zhenxing.miao@polymaker.com

1.4. Emergency telephone number

Emergency number : Only available during office hours (9:00a.m.-17:30p.m.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

| Name | Product identifier | | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--------------|--------------------|---------|---|
| polyurethane | CAS-No.: 9009-54-5 | 60 – 80 | Not classified |

EN (English) 1/8

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Name | Product identifier | | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|-----------------|---------------------|---------|---|
| POLYLACTIC ACID | CAS-No.: 26100-51-6 | 20 – 40 | Not classified |

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution. Obtain medical attention if irritation persists.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid dust formation. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

EN (English) 2/8

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid dust

formation.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

EN (English) 3/8

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Solid Physical state Colour : white. Odour odourless. Odour threshold : Not available Melting point 166 °C Freezing point Not applicable **Boiling point** Not available Flammability Non flammable. **Explosive limits** : Not applicable Lower explosion limit Not applicable Not applicable Upper explosion limit Not applicable Flash point : Not applicable Auto-ignition temperature : Not available Decomposition temperature Not available рΗ pH solution : Not available Viscosity, kinematic : Not applicable Solubility : insoluble in water. Partition coefficient n-octanol/water (Log Kow) : Not available : Not available Vapour pressure Vapour pressure at 50°C : Not available Density : Not available

Relative density : 1,2

Relative vapour density at 20°C : Not applicable Particle size : Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

EN (English) 4/8

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified : Not classified Reproductive toxicity STOT-single exposure : Not classified STOT-repeated exposure Not classified Aspiration hazard : Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine

disrupting properties

: The substance/mixture has no endocrine disrupting properties.

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

Not rapidly degradable

: Not classified: Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Polyurethane (9009-54-5)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by

endocrine disrupting properties

: The substance/mixture has no endocrine disrupting properties.

12.7. Other adverse effects

No additional information available

EN (English) 5/8

PolySupport™

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR | IMDG | IATA | ADN | RID |
|------------------------------|---------------|---------------|---------------|---------------|
| 14.1. UN number or ID number | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.2. UN proper shippin | g name | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.3. Transport hazard o | class(es) | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.4. Packing group | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.5. Environmental haz | ards | | • | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| No supplementary information | n available | • | 1 | 1. |

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

EN (English) 6/8

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).

Observe restrictions according Act on the Protection of Young People in Employment

(JArbSchG).

Water hazard class (WGK) Not classified according to Regulation Governing Systems for Handling Substances

Hazardous to Waters (AwSV).

Storage class (LGK, TRGS 510) : LGK 13 - Non-combustible solids.

Joint storage table

| LGK 1 | LGK 2A | LGK 2B | LGK 3 | LGK 4.1A |
|----------|---------|----------|----------|-----------|
| LGK 4.1B | LGK 4.2 | LGK 4.3 | LGK 5.1A | LGK 5.1B |
| LGK 5.1C | LGK 5.2 | LGK 6.1A | LGK 6.1B | LGK 6.1C |
| LGK 6.1D | LGK 6.2 | LGK 7 | LGK 8A | LGK 8B |
| LGK 10 | LGK 11 | LGK 12 | LGK 13 | LGK 10-13 |

Joint storage not permitted for : LGK 1, LGK 6.2, LGK 7. Joint storage with restrictions permitted for : LGK 4.1A, LGK 5.1C.

Joint storage permitted for LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1B, LGK 5.2,

LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12,

LGK 13, LGK 10-13.

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic

environment

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Switzerland

Storage class (LK) NG - Non-hazardous

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Abbreviations and acr | Abbreviations and acronyms: | |
|-----------------------|---|--|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways | |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road | |
| ATE | Acute Toxicity Estimate | |

EN (English) 7/8

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Abbreviations and acronyms: | | | |
|-----------------------------|--|--|--|
| BCF | Bioconcentration factor | | |
| BLV | Biological limit value | | |
| BOD | Biochemical oxygen demand (BOD) | | |
| COD | Chemical oxygen demand (COD) | | |
| DMEL | Derived Minimal Effect level | | |
| DNEL | Derived-No Effect Level | | |
| EC-No. | European Community number | | |
| EC50 | Median effective concentration | | |
| EN | European Standard | | |
| IARC | International Agency for Research on Cancer | | |
| IATA | International Air Transport Association | | |
| IMDG | International Maritime Dangerous Goods | | |
| LC50 | Median lethal concentration | | |
| LD50 | Median lethal dose | | |
| LOAEL | Lowest Observed Adverse Effect Level | | |
| NOAEC | No-Observed Adverse Effect Concentration | | |
| NOAEL | No-Observed Adverse Effect Level | | |
| NOEC | No-Observed Effect Concentration | | |
| OECD | Organisation for Economic Co-operation and Development | | |
| OEL | Occupational Exposure Limit | | |
| PBT | Persistent Bioaccumulative Toxic | | |
| PNEC | Predicted No-Effect Concentration | | |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail | | |
| SDS | Safety Data Sheet | | |
| STP | Sewage treatment plant | | |
| ThOD | Theoretical oxygen demand (ThOD) | | |
| TLM | Median Tolerance Limit | | |
| VOC | Volatile Organic Compounds | | |
| CAS-No. | Chemical Abstract Service number | | |
| N.O.S. | Not Otherwise Specified | | |
| vPvB | Very Persistent and Very Bioaccumulative | | |
| ED | Endocrine disrupting properties | | |

The classification complies with

: ATP 12

CIRS-EU-2023

This information is based on our current knowledge and is intended to describe the product for the purposes of nealth, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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EN (English) 8/8

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