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

1.1. Product identifier

Product form : Substance

Trade name : ANYCUBIC

PLA filament

Chemical name : 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3R,6R)-, polymer with rel-(3R,6S)-3,6-

dimethyl-1,4-dioxane-2,5-dione and (3S,6S)-3,6-dimethyl-1,4-dioxane-2,5-dione

EC-No. : 618-575-7 CAS-No. : 9051-89-2

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

1.2.1. Relevant identified uses

Intended for general public

Main use category : Consumer use
Use of the substance/mixture : 3D printer filaments

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Shenzhen Anycubic Technology Co.,Ltd

12-13th floor, Building #3B, Vanke Times Square, No.85 Longcheng Avenue, Longcheng Street, Longgang District 518000 Shenzhen, Guangdong Province - China

T 17688757950

weiwulin@anycubic.com

1.4. Emergency telephone number

Emergency number : 17688757950

Only available during office hours.

Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

2.2. Label elements

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

Child-resistant fastening : Not applicable Tactile warning : Not applicable

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2.3. Other hazards

Other hazards : Results of PBT and vPvB assessment : Not applicable.

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

Substance name : 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3R,6R)-, polymer with rel-(3R,6S)-3,6-

dimethyl-1,4-dioxane-2,5-dione and (3S,6S)-3,6-dimethyl-1,4-dioxane-2,5-dione

CAS-No. : 9051-89-2 EC-No. : 618-575-7

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,4-Dioxane-2,5-dione, 3,6-dimethyl-, (3R,6R)-, polymer with rel-(3R,6S)-3,6-dimethyl-1,4-dioxane-2,5-dione and (3S,6S)-3,6-dimethyl-1,4-dioxane-2,5-dione	(CAS-No.) 9051-89-2 (EC-No.) 618-575-7	100	Not classified

Full text of H- and EUH-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice : First aider: Pay attention to self-protection!. Concerning personal protective

equipment to use, see section 8. Never give anything by mouth to an

unconscious person. In case of doubt or persistent symptoms, consult always a

physician. Show this safety data sheet to the doctor in attendance.

Inhalation : Remove casualty to fresh air and keep warm and at rest. In case of doubt or

persistent symptoms, consult always a physician.

Skin contact : Remove contaminated clothing and shoes. Gently wash with plenty of soap

and water. In case of doubt or persistent symptoms, consult always a

physician.

Eyes contact : Rinse immediately carefully and thoroughly with eye-bath or water. Remove

contact lenses, if present and easy to do. Continue rinsing. In case of doubt or

persistent symptoms, consult always a physician.

Ingestion : Rinse mouth thoroughly with water. Get medical advice/attention.

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

Inhalation : Non-hazardous substance. No adverse effects are expected.

Skin contact : Non-hazardous substance. No adverse effects are expected.

Eyes contact : Non-hazardous substance. No adverse effects are expected.

Ingestion : Non-hazardous substance. No adverse effects are expected.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : carbon dioxide (CO2), powder, alcohol-resistant foam, water spray.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards : Not flammable.

Hazardous decomposition products in

case of fire

: Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Firefighting instructions : Evacuate area. Use water spray or fog for cooling exposed containers. Contain

the extinguishing fluids by bunding. Prevent fire fighting water from entering

the environment.

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

contained breathing apparatus.

Other information : Do not allow run-off from fire-fighting to enter drains or water courses.

Dispose of waste in accordance with environmental legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

For non-emergency personnel : Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation.

Do not breathe dust. Avoid contact with skin, eyes and clothing. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see section 8. Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No smoking.

6.1.2. For emergency responders

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so. Dam up the solid spill. Take up mechanically

(sweeping, shovelling) and collect in suitable container for disposal. Large spills: scoop solid spill into closing containers. This material and its container

must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Provide adequate ventilation. Do not breathe dust. Avoid contact with skin, eyes and clothing. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Avoid release to the environment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hygiene measures

: Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

 $: \ \, {\bf Store\ in\ a\ dry,\ cool\ and\ well-ventilated\ place.\ Do\ not\ store\ near\ or\ with\ any\ of}$

the incompatible materials listed in section 10.

Heat and ignition sources

: Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Protect from sunlight.

Packaging materials

: Keep only in the original container.

7.3. Specific end use(s)

3D printer filaments.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information : Recommended monitoring procedures : Personal air monitoring. Room air

monitoring

8.2. Exposure controls

Engineering measure(s)

: Provide adequate ventilation. Organisational measures to prevent /limit releases, dispersion and exposure. See Section 7 for information on safe

handling.

Personal protective equipment

: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific

workplace.

Hand protection

: Wear chemically resistant gloves (tested to EN374) . Suitable material: Not determined. Breakthrough time : Not determined. Thickness : Not determined. The quality of the protective gloves resistant to chemicals must be chosen as a

function of the specific working place concentration and quantity of hazardous

substances.

Eye protection : Use suitable eye protection (EN166): Safety glasses

Body protection : Wear suitable protective clothing

Respiratory protection : Not required for normal conditions of use

Thermal hazard protection : Not required for normal conditions of use. Use dedicated equipment.

Environmental exposure controls : Avoid release to the environment. Comply with applicable Community

environmental protection legislation.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Solid.
Colour : Grey.
Odour : Sweet.

Odour threshold : No data available pH : Not applicable pH solution : Not available Relative evaporation rate (butylacetate=1) : No data available Melting / freezing point : 150 – 180 °C Freezing point : No data available point and boiling range : Not applicable

Initial boiling point and boiling range : Not applicable : Not applicable

Auto-ignition temperature : $388 \, ^{\circ}\text{C}$ Decomposition temperature : $250 \, ^{\circ}\text{C}$

Flammability (solid, gas) : Not flammable

Vapour pressure : No data available

Vapour density : No data available

Relative density : 1,25

Solubility : Insoluble in water.

Partition coefficient n-octanol/water : No data available

Kinematic viscosity : Not applicable

Dynamic viscosity : Not applicable

Explosive properties : Not applicable. The study does not need to be conducted because there are

no chemical groups associated with explosive properties present in the

molecule.

Oxidising properties : Not applicable. The classification procedure needs not to be applied because

there are no chemical groups present in the molecule which are associated

with oxidising properties.

Explosive limits : No data available Particle size : Not available Particle size distribution : Not available Particle shape : Not available Particle aspect ratio : Not available Particle aggregation state : Not available Particle agglomeration state : Not available Particle specific surface area : Not available Particle dustiness : Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

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9.2.2. Other safety characteristics

Other properties : Glass Transition Temperature : 55-60 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions. Reference to other sections: 10.4 & 10.5.

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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight. See Section 7 for information on safe handling.

10.5. Incompatible materials

None known. See Section 7 for information on safe handling.

10.6. Hazardous decomposition products

Reference to other sections 5.2.

SECTION 11: Toxicological information

<u>11.1.</u>	Information on hazard classes as	defined in Regulation (EC) No 1272/2008	L
Acute to	toxicity	· Not classified (Based on available data	the classification criteria are not m

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

pH: Not applicable

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)

pH: Not applicable

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

ANYCUBIC

PLA filament (9051-89-2)

Kinematic viscosity Not applicable

Other information : Symptoms related to the physical, chemical and toxicological characteristics.

For further information see section 4.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties

: 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

11.2.2 Other information

Other information

: Symptoms related to the physical, chemical and toxicological characteristics, For further information see section 4

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties

: According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment".

nt, : Not classified

Hazardous to the aquatic environment,

short-term (acute)

Hazardous to the aquatic environment,

long-term (chronic)

: Not classified

12.2. Persistence and degradability

ANYCUBIC PLA filament (9051-89-2)	
Persistence and degradability	No additional information available.

12.3. Bioaccumulative potential

ANYCUBIC PLA filament (9051-89-2)	
Partition coefficient n-octanol/water	No data available
Bioaccumulative potential	No additional information available.

12.4. Mobility in soil

ANYCUBIC PLA filament (9051-89-2)	
Mobility in soil	No data available

12.5. Results of PBT and vPvB assessment

ANYCUBIC PLA filament (9051-89-2)		
Results of PBT assessment	Not applicable	

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties

: 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

12.7. Other adverse effects

Other adverse effects : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Avoid release to the environment. Dispose of empty containers and wastes safely. See Section 7 for information on safe handling. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations.

European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC)

: Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities

SECTION 14: Transport information

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

In accordance with ADR / RID / IMDG / IATA / ADN					
ADR	IMDG	IATA	ADN	RID	
14.1. UN number					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
14.2. UN proper shipping name					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
14.3. Transport haza	<u>ırd class(es)</u>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
14.4. Packing group					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
14.5. Environmental hazards					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
No supplementary information available					

14.6. Special precautions for user

Special precautions for user : No data available

- Overland transport

Not applicable

- Transport by sea

Not applicable

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- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Code: IBC : No data available.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

ANYCUBIC

PLA filament is not on the REACH Candidate List

ANYCUBIC

PLA filament is not on the REACH Annex XIV List

15.1.2. National regulations

France

No ICPE	Installations classées Désignation de la rubrique	Code Régime	Rayon
na	Not Applicable	na	na

Germany

: WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1) Regulatory reference

German storage class (LGK) : LGK 13 - Non-combustible solids

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

BImSchV)

Netherlands

stoffen

Waterbezwaarlijkheid : B (4) - Weinig schadelijk voor in het water levende organismen

SZW-lijst van kankerverwekkende : The substance is not listed

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

SZW-lijst van reprotoxische stoffen -Borstvoeding

SZW-lijst van reprotoxische stoffen -

SZW-lijst van reprotoxische stoffen -

Vruchtbaarheid

: The substance is not listed

: The substance is not listed

Ontwikkeling

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15.2. Chemical safety assessment

Not applicable

SECTION 16: Other information

Abbreviations and acronyms:

ABM = Algemene beoordelingsmethodiek
ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods Code
LEL = Lower Explosive Limit/Lower Explosion Limit
UEL = Upper Explosion Limit/Upper Explosive Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
BTT = Breakthrough time (maximum wearing time)
DMEL = Derived Minimal Effect level
DNEL = Derived No Effect Level
EC50 = Median Effective Concentration
EL50 = Median effective level
ErC50 = EC50 in terms of reduction of growth rate
ErL50 = EL50 in terms of reduction of growth rate
EWC = European waste catalogue
LC50 = Median lethal concentration
LD50 = Median lethal dose
LL50 = Median lethal level
NA = Not applicable
NOEC = No observed effect concentration
NOEL: no-observed-effect level
NOELR = No observed effect loading rate
NOAEC = No observed adverse effect concentration
NOAEL = No observed adverse effect level
N.O.S. = Not Otherwise Specified
OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
PNEC = Predicted No Effect Concentration
Quantitative structure-activity relationship (QSAR)
STOT = Specific Target Organ Toxicity
TWA = time weighted average
VOC = Volatile organic compounds
 WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

Sources of key data used to compile the : ECHA (European Chemicals Agency). LOLI. Supplier information.

datasheet

Training advice : Training staff on good practice.

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Classification according to Regulation (EC) No. 1272/2008 [CLP]
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

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