

SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

Siraya Tech Tenacious

Creation date 30th Dec 2024
Revision date Version 4.0

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

1.1. Product identifier

Product name: Siraya Tech Tenacious 3D Printer Resin (Clear, 1kg)

other name: Tenacious by Siraya Tech

Substance / mixture mixture
UFI: JTGA-9V43-D209-K4TC

1.2. Relevant identified uses of the substance or mixture and uses advised against Mixture's intended use

Mixture uses advised against
not available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Name or trade name: Siraya Tech
Address: 15806 Clarkgrove St, Hacienda Heights, CA USA, 91745
EU VAT Reg No: IT12299250964
Phone +1 3234128788
E-mail: support@siraya.tech
Web address: siraya.tech

Competent person responsible for the safety data sheet

Name Emma Wang
E-mail support@siraya.tech

1.4. Emergency telephone number

European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

Skin Sens. 1A, H317
Eye Irrit. 2, H319
Eye Dam. 1, H318
Oral. 2 H302

Full text of all classifications and hazard statements is given in the section 16.

2.2. Label elements

Hazard pictogram


Signal word

Warning

Hazardous substances

Propylidynetrimethanol, ethoxylated, esters with acrylic acid
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide
1-(Morpholin-4-yl)propenone

Hazard statements

H302, H373 Harmful if swallowed
H317 May cause an allergic skin reaction.
H318, H319 Causes serious eye irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P264 Wash hands and exposed parts of the body thoroughly after handling.
P280 Wear protective gloves.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container to be handing over to the person authorized to dispose of waste or by returning to the supplier.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients
3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 28961-43-5 EC: 500-066-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid	25-40	Skin Sens. 1, H317 Eye Irrit. 2, H319	
CAS: 73324-00-2 EC: 615-966-4	2-Propenoic acid, 2-hydroxyethyl ester, polymer with 1,1'-methylenebis(4-isocyanatocyclohexane) and .alpha.,.alpha.'.alpha."-1,2,3	35-65	Eye Irrit. 2, H319	
CAS: 5117-12-4 EC: 418-140-1	1-(Morpholin-4-yl)propenone (4-Acryloylmorpholine)	10-15	Eye Dam. 1, H318 Skin Sens. 1, H317 Oral. 4 H302	
Index: 015-189-00-5 CAS: 162881-26-7 EC: 423-340-5	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	0.1	Skin Sens. 1A, H317 Aquatic Chronic 4, H413	

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: If overcome by exposure, give fresh oxygen or artificial respiration as needed.

Skin contact: Immediately remove contaminated clothing. Wash skin thoroughly with mild soap/water. Flush with lukewarm water for 15 minutes. If sticky, use waterless cleaner first. Seek medical attention if ill effect or irritation develops.

Eyes contact: In case of eye contact, immediately rinse with clean water for 20-30 minutes. Retract eyelids often. Consult medical professionals if irritation persists.

Ingestion: If large quantity swallowed, give lukewarm water (pint) if victim completely conscious/alert. Consult medical professionals if irritation persists.

The protection of first-aiders: Wear C class protective equipment and first aid in safety area.

Notes to physicians: Slight skin irritation, Symptoms may include localized redness or rash and swelling of the affected area, Symptoms may be delayed.

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

If inhaled

not available

If on skin

Slight skin irritation / rash.

If in eyes

Eye irritation

If swallowed

Stomach irritation

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

Notes to physicians: Slight skin irritation, Symptoms may include localized redness or rash and swelling of the affected area, Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Suitable fire extinguishing media: Water, foam, carbon dioxide or dry chemical.

Unsuitable extinguishing media

not available

5.2. Special hazards arising from the substance or mixture

not available

5.3. Advice for firefighters

Treated as the substance as common plastic

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Recommend Wear proper protective equipment, avoid raw material contact and breathing mask is optional for vapor inhalation as the substance has minimal vapor release.

6.2. Environmental precautions

Dispose/report per regulatory requirements.

6.3. Methods and material for containment and cleaning up

Soapy water and degreaser is sufficient for cleaning up

6.4. Reference to other sections

not available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Check for leakages and

7.2. Conditions for safe storage, including any incompatibilities

Storage procedures: Store drums above 10°C/50°F and below 32°C/90°F. Bulk storage temperature

range:15-27°C/59-80°F. Store drums away from heat sources, strong oxidizers, radiation and other initiators. Use product within six months of receipt for optimum results. If material freezes, heat and mix to redistribute the inhibitor. Product may also be heated to facilitate handling. Heat product container slowly to 40°C/104°F for not more than 24 hours. Convection ovens or warm water bath (preferred due to more efficient heat transfer) are recommended for heating. Do not use drum heater. The facility should be enclosed with no direct sunlight and exposure to UV lights.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exhaust waste gas to outdoor, and take applicable measure to protect environment.

Using local exhaust ventilation and closed processing system when mass production.

Complement exhaust air by ventilation system with supply plenty fresh air.

8.2. Exposure controls

not available

Eye/face protection

Common Safety Goggle to protect eyes from splashes but this is a rare occurrence.

Skin protection

Nitrile gloves

Respiratory protection

None required

Thermal hazard

None required

Environmental exposure controls

not available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state liquid

Colour data not available

Odour data not available

Melting point/freezing point data not available

Boiling point or initial boiling point and boiling range 110 °C

Flammability data not available

Lower and upper explosion limit data not available

Flash point 140 °C

Auto-ignition temperature data not available

Decomposition temperature data not available

pH 6.8-7 (undiluted)

Kinematic viscosity 100 mm²/s at 40 °C

Solubility in water data not available

Partition coefficient n-octanol/water (log value) data not available

Vapour pressure data not available

Density and/or relative density data not available

Relative vapour density data not available

Particle characteristics data not available

9.2. Other information

Corrosion rate 0 mm/year at 55 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

Only react to exposure of UV light

10.2. Chemical stability

Stable on normal condition

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

not available

10.5. Incompatible materials

not available

10.6. Hazardous decomposition products

Acrid smoke-fumes/carbon monoxide/carbon dioxide and perhaps other toxic vapors may be released during a fire involving this product.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

No significant signs or symptoms indicative of any adverse health hazard are expected to occur at standard conditions due to the low volatility of this material. However, aerosols, or vapors which may be generated at elevated processing temperatures, may cause respiratory tract irritation. Symptoms of irritation may include coughing, mucous production and shortness of breath.

Acute toxicity

None

Skin corrosion/irritation

Although no appropriate human or animal health effects data are known to exist, this material is expected to be a skin irritant. Symptoms of irritation may include redness or rash, swelling of the affected area and blistering. Repeated or prolonged skin contact may cause a more severe skin response such as ulcers and scarring. Symptoms of skin exposure may be delayed 24-48 hours. Although no appropriate human or animal health effects data is known to exist, this material may cause an allergic skin reaction

Serious eye damage/irritation

Although no appropriate human or animal health effects data are known to exist, this material is expected to cause eye irritation. May cause moderate irritation with symptoms including burning sensation, tearing, redness or swelling.

Respiratory or skin sensitisation

not available

Germ cell mutagenicity

not available

Carcinogenicity

not available

Reproductive toxicity

not available

Toxicity for specific target organ - single exposure

not available

Toxicity for specific target organ - repeated exposure

not available

Aspiration hazard

not available

11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information**12.1. Toxicity**

not available

12.2. Persistence and degradability

not available

12.3. Bioaccumulative potential

not available

12.4. Mobility in soil

not available

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with 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**

not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

not relevant

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H317 May cause an allergic skin reaction.

H318,H319 Causes serious eye irritation.

H413 May cause long lasting harmful effects to aquatic life.

H302, H373 Harmful if swallowed

Guidelines for safe handling used in the safety data sheet

P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children.

P264 Wash hands and exposed parts of the body thoroughly after handling. P280 Wear protective gloves.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container to by handing over to the person authorized to dispose of waste or by returning to the supplier.

Other important information about human health protection

not available

Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods by road

BCF Bioconcentration Factor

CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures

EC Identification code for each substance listed in EINECS

EINECS European Inventory of Existing Commercial Chemical Substances EmS Emergency plan

EU European Union

EuPCS European Product Categorisation System

IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals

ICAO International Civil Aviation Organization

IMDG International Maritime Dangerous Goods

IMO International Maritime Organization

INCI International Nomenclature of Cosmetic Ingredients

ISO International Organization for Standardization

IUPAC International Union of Pure and Applied Chemistry

log Kow Octanol-water partition coefficient

OEL Occupational Exposure Limits

PBT Persistent, Bioaccumulative and Toxic

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals RID Agreement on the transport of dangerous goods by rail

UN Four-figure identification number of the substance or article taken from the UN Model Regulations

UVCB Substances of unknown or variable composition, complex reaction products or biological materials

VOC Volatile organic compounds

vPvB Very Persistent and very Bioaccumulative

Aquatic Chronic Hazardous to the aquatic environment (chronic)

Eye Irrit. Eye irritation

Skin Sens. Skin sensitization

Training guidelines

not available

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.

REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers. **The changes (which information has been added, deleted or modified)**

The version 4.0 replaces the SDS version from 26 August 2023. Changes were made in sections 2 and 16.