Material Safety Data Sheet

SECTION 1、Chemical Product and Company Identification

Product name: Siraya Tech PPA-CF Core Black 3D Printer Filament - PPA Nylon with 25% Core-Concentrated Carbon Fiber, Ultra-Strong, Heat-Resistant, Low Warpage for Automotive & Industrial Parts (1kg)
Other name: Fibreheart PPA-CF Core by Siraya Tech

Recommended use of the chemical and restrictions on use：
For model making and 3D printing

Names, addresses, and phone numbers of the manufacturer or supplier：
Siraya Tech
417 S San Gabriel Blvd, San Gabriel, CA, 91776 United States +1 6267338422

Emergency contact phone numbers/fax numbers：
Shuy Peng/+1 6267338422

SECTION 2、Hazard Identification

2.1 Classification The material is **not hazardous** according to EC 1272/2008

2.2 Label elements
Health hazards: Not hazardous
Environmental hazards Not hazardous
Hazard symbol None
Signal Word None
Hazard Statement None
Precautionary statement None
PBT and vPvB substances Material does not contain PBT and vPvB substances

GHS / CLP Hazard Classification of the mixture:

None
Transport Information

Department of transportation classification: Not hazardous by D.O.T. regulations
D.O.T. proper shipping name: Not regulated
International Maritime Dangerous Goods Code (IMDG): **Not regulated**
International Air Transportation Association (IATA): **Not regulated**

Precautionary: None

Transport Information
Department of transportation classification: Not hazardous by D.O.T. regulations
D.O.T. proper shipping name: Not regulated
International Maritime Dangerous Goods Code (IMDG): **Not regulated**
International Air Transportation Association (IATA): **Not regulated**

SECTION 3、Composition/Information on Ingredients

Mixtures：
Chemical property：

Substance Identity	CAS No.	Approx. Weight (%)
Polyphthalamide (PPA)	27135-32-6	70-80
Carbon Fiber	7440-44-0	20-25

SECTION 4、First Aid Measures

4.1 Skin contact If burned by contact with molten material, cool down with water for at least 10 minutes. In case of severe burns, do not remove molten material from skin and consult a physician.
4.2 Eye contact Not likely due to physical state. Grinding or pelletizing of filament may lead to fine dust particles which can cause eye irritation. Wash with plenty of water and get medical attention if symptoms persist.
4.3 Inhalation Not likely due to physical state.
4.4 Ingestion Not likely due to physical state. Material is not expecte

SECTION 5、Fire Fighting Measures

5.1 Extinguishing media Water mist, carbon dioxide, foam, dry powder
5.2 Extinguishing media not to be used for safety reasons High pressure water jet
5.3 Special hazards arising from the mixture During incomplete combustion release of carbon monoxide, acetic acid and decomposition products possible
5.4 Protective equipment for fire fighters Use full protective clothing for chemicals and a selfcontained breathing apparatus

SECTION 6、Accidental Release Measures

6.1 Personal precautions Avoid dust formation and static discharge. Do not overheat material
6.2 Environmental precautions Should not be released into environment. Do not allow material to enter drains or water courses.
6.3 Cleanup, containment and disposal of spill Avoid dust formation. Sweep up into suitable container for disposal.
6.4 Reference to other sections See section 8 and 13

SECTION 7、Safe Handling and Storage Measures
7.1 Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke at the workplace. Avoid dust formation by cutting or grinding. During printing, ensure good ventilation and local exhaust.
7.2 Conditions for safe storage To ensure technical integrity of the product store in the original container/box and keep at temperatures below 50ºC and in a dry place. Protect from moisture, product may be hygroscopic
7.3 Specific use Under anticipated conditions of use no further measures required. No available exposure scenario's.

SECTION 8、Exposure Controls Measures
8.1 Control parameters Exposure limits Material contains no substances with occupational exposure limit values Biological limit values Not established Recommended monitoring procedures No information available Derived No Effect Level (DNEL) No information available

8.2 Exposure controls Appropriate Engineering Controls Keep at temperatures below 240ºC. Ensure adequate ventilation in confined areas. Individual protection measures Eye protection Not required (for FDM printing) Hand protection Not required (for FDM printing) Skin protection Not required (for FDM printing) Respiratory protection Not required (for FDM printing) Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Environmental exposure controls Do not allow product to enter drains, water courses or soil

SECTION 9、Physical and Chemical Properties
Appearance (physical state, color, etc)：

Black liquid at 25℃	Odor：Low Odor
Odor threshold：—	Melting point/freezing point：—
pH value：AP 6.8 - 7.2	Boiling point/boiling range：>250℃
Flammability (solid, gas)：—	Flash point： 450℃
Decomposition temperature：—	Test method：Closed cup
Autoignition temperature：—	Explosion limits：—
Vapor pressure：—	Vapor density：—
Density：1.2~1.3	Solubility：Water: Negligible

Partition coefficient of n-octanol/water：— Evaporation rate：—

SECTION 10、Chemical Stability and Reactivity Information

10.1 Reactivity Not reactive under normal handling conditions
10.2 Chemical stability Stable for handling under normal handling conditions
10.3 Possibility of hazardous reactions No hazardous reactions with other chemicals known, under normal handling conditions.
10.4 Conditions to avoid Do not grind, pelletize or mill the material . Avoid temperatures above 240ºC.
10.5 Incompatible materials Avoid water which can cause degradation of material. Material can react with strong oxidizers.
10.6 Hazardous decomposition products Carbon monoxide, carbon dioxide, aldehydes, acetic acid, low molecular weight oligomers.

SECTION 11、Toxicological Information

LD 50 (Rat oral) >5000 mg/kg (PLA) Skin irritation Not tested (not to be expected) Eye irritation Not tested (not to be expected) Skin sensitation Not tested (not to be expected) Respiratory sensitation Not tested (not to be expected) CMR effects None of the ingredients is listed as CMR substance General remarks No harmful, toxic and sensitive effects have been reported to date Information listed in this section is transferred from safety data from the ingredients of this product.

SECTION 12、Ecological Information

12.1 Aquatic toxicity No information available 12.2 Persistence and degradability Product is biodegradable. 12.3 Bioaccumalative potential No information available 12.4 Mobility in soil No information available 12.5 Results of PBT and vPvB assessment Product does not contain PBT or vPvB substances 12.6 Other adverse effects No adverse effects known to date 12.7 Additional ecotoxicological information The material is practically non soluble in water and solid. Therefore, under environmental conditions, no detrimental effects on plants, animals and micro-organisms are to be expected.

SECTION 13、Waste Disposal Measures

Sewage disposal-relevant information

13.1 Waste treatment methods Dispose of in accordance with local regulations
13.2 Additional information n.a.
13.3 Packaging Dispose of in accordance with local regulations

SECTION 14、Transport Information

Department of transportation classification: Not hazardous by D.O.T. regulations
D.O.T. proper shipping name: Not regulated
International Maritime Dangerous Goods Code (IMDG): **Not regulated**
International Air Transportation Association (IATA): **Not regulated**

SECTION 15、Regulatory Information

Applicable regulations：N/DA

SECTION 16、Other Information

Reference documents

MSDS prepared by

Organization name：

Siraya Tech

417 S San Gabriel Blvd, San Gabriel, CA, 91776 United States +1 6267338422

Title：Lead Chemist Name (signature)：Emma Wang

Date：2024/10/30

Remark：“ – “ = not available ; “ / “ = not applicable