

Safety Data Sheet

PRODUCT NAME: RIZIUM CARBON



MSDS No: PF07802

Version: 1.0

Issue date: 10/01/2019

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

Product name Rizium Carbon

Details of the supplier of the safety data sheet:

Manufacturer/Supplier name

Rize Inc.

Address

575 Virginia Road, Suite 320B
Concord, MA 01742

USA

Customer Service

1-978-699-3085

Emergency telephone (English only)

1-978-699-3085

Relevant uses and uses advised against:

Use: 3D printing filament

SECTION 2: HAZARD(S) IDENTIFICATION

GHS-US Classification

Not a hazardous substance or mixture

GHS label elements

None

Precautionary statements

Not applicable

Other hazards

As supplied and when used as intended, this product is not expected to cause any adverse health effects. Toxic combustion products may be released under fire conditions

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product does not contain any hazardous ingredient at or above regulated thresholds

SECTION 4: FIRST AID MEASURES

Inhalation

N/A under normal use

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Skin contact	N/A under normal use
Eye contact	Treat as any foreign particulate matter. Do not rub eye. Flush eyes with running water for several minutes while holding eyelids open. Consult a physician if irritation persists
Ingestion	Normally not needed. If large quantities are ingested or if you feel unwell, call your local Poison Control Center (1-800-222-1222 in the U.S.) or physician

Most important symptoms, both acute and delayed

None known when used as intended in Rize printer

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media:

Use extinguishing media suitable for Class A fires (ordinary combustibles). Carbon dioxide is generally not recommended for use on Class A fires as a lack of cooling capacity may result in re-ignition.

Laboratory tests for thermal properties were conducted using OECD Guidelines. The results are indicated below:

93/105/EC Annex VIID 3.10 (Flammability (solids)): Not highly flammable

93/105/EC Annex VIID 3.11 (Explosive properties): Not explosive

93/105/EC Annex VIID 3.12 (Relative self-ignition temperature for solids): Does not self-ignite

93/105/EC Annex VIID 3.16 (Thermal stability): Stable at room temperature

Special Hazards arising from the substance or mixture:

Product will burn in a fire.

Advice for firefighters:

As in any fire, wear self-contained breathing apparatus operated in pressure-demand mode (NIOSH approved or equivalent) and full protective gear. Toxic gases may be formed upon combustion and represent a hazard to firefighters. See Section 10 for information on combustion products.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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Personal precautions, protective equipment and emergency procedures

No special requirements

Environmental precautions

As with all industrial chemicals, use of good chemical hygiene and environmental stewardship practices is recommended

Methods and materials for containment and cleaning up

Place into appropriate containers for reuse, recycle or disposal

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.
At temperature above 400C, product will emit fumes and vapors. If exposure to temperature >400C occurs, use only with adequate ventilation, do not breathe (dust, vapor or fumes) and wash thoroughly after handling.
Any post-processing operations involving heat sufficient to result in polymer breakdown emitting smoke and fumes should be conducted in such a manner to avoid inhalation of fumes. Local exhaust ventilation and respiratory protection may be required

Conditions for safe storage

Store in a cool, dry area away from direct light to maintain quality

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substance with occupational exposure limit values

Engineering measures

None required when used as intended in Rize printer

Personal protective equipment

Eye/Face/Skin protection: follow facilities guidelines

Respiratory protection: respiratory protection is not required during normal use and handling operations

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Physical State:	Solid
Odor:	None
Odor Threshold:	Not Applicable
Vapor Pressure:	Negligible
Vapor Density (Air=1):	Not Applicable
pH:	Not Determined
Volatiles (minus H ₂ O) w/w%:	<0.0001
Evaporation Rate (water = 1):	Not Applicable
Viscosity (B-type viscometer @ 60 rpm):	Not Applicable
Octanol/Water Partition Coefficient:	Not Determined
Flammability:	See Section 5
Water Solubility:	Insoluble
Melting Point/Freezing Point (°F):	Not Determined
Relative Density (water = 1):	1.01
Flash Point:	Not Applicable
Initial Boiling Point:	Not Applicable
Autoignition Temperature (°F):	Not Determined
Lower Explosive (Flammable) Limit:	Not Applicable
Upper Explosive (Flammable) Limit:	Not Applicable
Decomposition Temperature:	Not Determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Hazardous polymerization will not occur
Chemical stability	Stable under normal conditions of use and storage
Possibility of hazardous reactions	None known
Conditions to avoid	Overheating (> 400C)
Incompatible materials	As with all organic materials, avoid contact with strong oxidizers and reducing agents
Hazardous decomposition products	Carbon monoxide, carbon dioxide, hydrocarbons

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SECTION 11: TOXICOLOGICAL INFORMATION

Routes of entry:

Eye contact, skin contact, vapor/dust, inhalation

Symptoms of overexposure:

The product, as supplied, is not expected to cause acute or chronic effects when use as intended in Rize printer. Abnormal use or handling of the product may create vapors or fumes which may cause respiratory tract irritation.

Acute toxicity

Chemical name	LD50 Oral (Rat)	LD50 Dermal (Rabbit)	LC50 Inhalation
Proprietary resin	No data available	No data available	No data available

Carcinogenicity

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

SECTION 12: ECOLOGICAL INFORMATION

No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste resulting from this product as supplied is not known to be classified as a hazardous waste per the current listings and characteristics contained in 40 CFR Part 261, and its Appendices. It is the generator's responsibility to determine, per the regulation, the applicability of the Resource Conservation and Recovery Act (RCRA), as well as all state, local, or other governmental agency waste disposal regulations, to the particular waste materials prior to treatment or disposal

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SECTION 14: TRANSPORT INFORMATION

Domestic regulation

DOT: this product is not defined or designated as a hazardous material by the US Department of Transportation under Title 49 of the Code of Federal Regulations

International regulations

IATA: This product is not classified as a dangerous good for transport

IMDG: This product is not classified as a dangerous good for transport

TDG: This product is not classified as a dangerous good for transport

SECTION 15: REGULATORY INFORMATION

EPA SARA TITLE III CHEMICAL LISTINGS

Section 311/312: None

This product contains the following chemical(s) exceeding the *de minimis* amount subject to reporting under SARA 313: None

US State Right to Know

This product contains chemical(s) exceeding the *de minimis* amount subject to disclosure under the following State Right-to-Know regulations:

Chemical name	CAS #	Key (see below)
Proprietary resin	proprietary	PA NH

Key description:

PA NH : Pennsylvania Non Hazardous Substance >3%

California Prop. 65

This product is not known to contain any chemicals currently listed as carcinogens

International regulations

TSCA	All ingredients listed or exempt
NECSI	All ingredients listed or exempt
KECL	All ingredients listed or exempt
AICS	All ingredients listed or exempt
IECSC	All ingredients listed or exempt
PICCS	Not listed
DSL	All ingredients listed or exempt
ENCS	All ingredients listed or exempt

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SECTION 16: OTHER INFORMATION

HMIS

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant; 1=slight; 2=moderate; 3=high; 4=extreme

* HMIS (Hazardous Materials Identification System) ratings apply to products as packaged

NFPA



* NFPA (National Fire Protection Association) ratings identify hazards during a fire emergency

First issue date

: 10/01/2019

Disclaimer

The information provided in this Material Safety Data Sheet is accurate to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Rize Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore.

End of safety data sheet