

FilamentOne PVA PRO SELECT



Material Safety Data Sheet

According to Federal Register/Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 07/01/2019

Section 1: Identification of the substance/preparation and of the company

1.1 Product identification

Product name: PVA PRO SELECT
Other name: Not listed

1.2 Application

Intended use: Filament for 3D Printing
Professional and industrial use

1.3 Manufacturer/Supplier

FilamentOne Premium Polymers

13600 Copper Ave NE Ste C
Albuquerque, NM 87123
USA
info@filamentone.com

1.4 Emergency telephone number

1 (855) 247-0502

Section 2: Hazards identification

2.1 Classification of the substance or mixture classification

Not classified

2.1 Label elements

Not applicable

Section 3: Composition/information on ingredients

3.2 Mixtures

Polyvinyl Alcohol Compound >96%
Methanol (impurity) <1%
CAS number: 67-56-1

Section 4: First Aid Measures

4.1 Description of first aid measures

First-aid measures general:	If you feel unwell, seek medical advice.
First-aid measures after inhalation:	Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact:	Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact:	Direct contact with the eyes is likely to be irritating. Rinse eyes with water eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion:	Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/injuries:	Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/injuries after skin contact:	Unlikely to cause harmful effects. ON HEATING: Burns.

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 fog, Dry chemical
Unsuitable extinguishing media:	Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting:	Do not use a solid water stream as it may scatter and spread fire. Exposure to decomposition products may be a hazard to health.
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5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.
Use personal protective equipment.
Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
In the event of fire and/or explosion do not breathe fumes.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Do not walk on spilled material. Avoid dust formation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Avoid dust formation. Throw into appropriate disposal containers.

6.4 Reference to other sections

No additional information available.

Section 7: Handling and storage

7.1 Precautions for safe handling

Use personal protective equipment as required. Avoid contact with skin and eyes. Low hazard for usual handling. Workers should be protected from the possibility of contact with molten material during fabrication.

7.2 Conditions for safe storage, including any incompatibilities

Store at temperatures not exceeding 50 °C/ 122 °F. Keep cool. No special restrictions on storage with other products.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Component:	Methanol (impurity) CAS 67-56-1	
	STEL	333 mg/m ³
		250 ppm
	TWA	266 mg/m ³
		200 ppm

8.2 Exposure controls

Eye protection:	Wear safety glasses.
Hand protection:	Wear protective gloves. Use barrier cream regularly. Protective heat-insulating gloves are to be used during thermal processing.
Respiratory protection:	Do not breathe dust. In case of dust or aerosol formation use respiration with an approved filter. Note time limit for wearing respiratory protective equipment. In the case of vapour formation, use a respirator with an approved filter. Respirator with filter for organic vapour.
Skin and body protection:	Wear protective clothes.
Hygiene Measures:	Do not eat, drink or smoke while using the product. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before re-use.
Type of filter:	Particles type (P) Thermal decomposition

Combinated type, particles, anorganic and acid fumes/vapours, ammonia/amines, organic vapours (ABEK-P).

In case of short-term contact, use breathing apparatus with filter, in case of intensive or longer exposition, use self-breathing apparatus.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Solid
Appearance:	Plastic rod coiled on a spool
Color:	White to light yellow
Odor:	Slight to no odor
Odor threshold:	No data available
pH:	No data available
Melting point / Range:	190 – 210 °C
Freezing point:	Not applicable
Boiling point:	No data available
Flash point:	Not applicable
Relative evaporation rate:	No data available
Flammability (solid, gas):	Fine dust dispersed in air may ignite
Explosion limits:	Not applicable
Explosive properties:	No data available
Oxidizing properties:	No data available
Vapor pressure:	No data available
Density:	>1 g/ml (25°C)
Relative vapor density at 20 °C:	No data available
Solubility:	Insoluble in water
Log Pow:	No data available
Auto-ignition temperature:	440 °C
Decomposition temperature:	>210 °C
Viscosity, kinematic:	Not applicable

9.2 Other information

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

Avoid elevated temperatures for prolonged periods of time. While printing, keep away from sparks and open flame

10.5 Incompatible materials

Oxidizing agents, Acids, Bases

10.6 Hazardous decomposition products

Decomposition products on thermal decomposition: Carbon monoxide, Carbon dioxide, Nitrogen oxides (Nox), hydrocyanic acid (HCN).

Section II: Toxicological information

II.1 Information on toxicological effects

Component:	Methanol (impurity) CAS 67-56-1
Acute oral toxicity:	LD50, species Rat, test result: 1187 - 2769 mg/kg
Acute dermal toxicity:	LD50, species Rat, test result: 17100mg/kg
Acute inhalation toxicity:	LC50, species Rat, test result: 128200 mg/ m3 Exposure time: 4 h
Acute toxicity:	Not classified
Skin corrosion/irritation:	Not classified
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	This product depending on color may contain titanium dioxide Cas. No. 13463-67-7 and/or carbon black (Cas. No. 1333-86-4) both of which have been characterized by IARC as possibly carcinogenic to humans (Group 2B). These substances have NOT been characterized as potential carcinogens by either NTP or OSHA. This product mixture is encapsulated in thermoplastic, and is not in respirable form. Therefore, the risk is considered to be minimal, to the point where the hazard is negligible.
Reproductive toxicity:	Not classified
Specific target organ toxicity:	Not classified
Specific target organ toxicity:	Not classified
Aspiration hazard:	Not classified
Symptoms/injuries after skin contact:	Unlikely to cause harmful effects. ON HEATING: Burns.

Section 12: Ecological information

12.1 Toxicity

Ecology - general: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Component: Methanol (impurity) CAS 67-56-1
Test Results
EC50 Algae: 22000 mg/l 96 hours
EC50 Daphnia magna: > 10000 mg/l/48 hours
LC50 Fish: 15400 mg/l 96 hours

12.2 Persistence and degradability

This product is not biodegradable

12.3 Bioaccumulative potential

No additional information available

12.4 Mobility in soil

No additional information available

12.5 Other adverse effects

No additional information available

Section 13: Disposal considerations

13.1 Waste treatment methods

Dispose in a safe manner in accordance with local/national regulations.

If the PVA filament is dissolved in water, the effluent can be disposed of through the drain, but only if this effluent is eventually treated in a waste water treatment plant.

Section 14: Transport information

Department of Transportation (DOT): In accordance with DOT
Not regulated for transport

TDG: No additional information available

Transport by sea: No additional information available

Air transport: No additional information available

Section 15: Regulatory information

15.1 US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2 International regulations

Canada:	No additional information available
EU-Regulations:	No additional information available
National regulations:	Listed on IARC (International Agency for Research on Cancer) This product may contain titanium dioxide (Cas. No. 13463-67-7) and/or carbon black (Cas. No. 1333-86-4) both of which have been characterized by IARC as possibly carcinogenic to humans (Group 2B). These substances have NOT been characterized as potential carcinogens by either NTP or OSHA. This product mixture is encapsulated in thermoplastic, and is not in respirable form. Therefore, the risk is considered to be minimal, to the point where the hazard is negligible.

15.3 US State regulations

California Proposition 65 - This product does not contain any substances known to the State of California to cause cancer, birth defects, and/or other reproductive harm.

Section 16: Other information

The information is published in the best knowledge and information of the company. The final usage of the product must be assessed by the user. The company is not responsible for any risks caused by incorrect handling or processing.