PVA-20

UPDATE: 1.09.2020

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier — Trade name Filament PVA-20 1,75mm; Filament PVA-20 2,85mm

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

1.2.1. Relevant identified uses — Thermal processing: FDM/FFF

1.2.2. Uses advised against — Not available.

1.3. Company

Producent/Dostawca: Omni3d sp z o.o.
Adres: ul. Św Michała 43 Poznań 61-119
Telefon: 886 618 690
Adres e-mail: sales@omni3d.com

1.4. Emergency telephone number — EU-wide emergency number: 112

2. HAZARD IDENTIFICATION

2.1. Classification of the substance/mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended
This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.
Hazard summary
Dusts may irritate the respiratory tract, skin and eyes. Exposed individuals my experience eye tearing, redness, and discomfort. Liberated dust may irritate throat and respiratory system and cause coughing. Prolonged contact may cause dryness of the skin.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended
Contains: Polyvinyl alcohol compound.
Hazard pictograms: none.
Signal word: none.
Hazard statements: this mixture does not meet the criteria for classification.
Precautionary statements
Prevention: use personal protective equipment as required.
Response: no specific first aid measures noted.
Storage: store in a dry area; store in a closed container.
Disposal: dispose of waste and residues in accordance with local authority requirements.

2.3. Other hazards

Fine particles may form explosive mixtures with air. This material does not ignite easily; however, feasible precautions against dust explosion are recommended.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Polyvinyl alcohol compound	> 96	N/A	-	-	
Classification: -					
Methanol (impurity)	> 1	67-56-1 200-659-6	01-2119433307-44-XXXX	603-001-00-X	#
Classification: Flam. Liq. 2;H225, Acute Tox. 3;H301, Acute Tox. 3;H311, Acute Tox. 3; H331, STOT SE 1;H370					

List of abbreviations and symbols that be used above
#: this substance has been assigned Community workplace exposure limit(s).
Composition comments
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. FIRST AID MEASURES

General information
Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation
Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact
Wash off with soap and water. Get medical attention if irritation develops and persist.
Eye contact
Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persist.
Ingestion
Rinse mouth. Get medical attention if symptoms occur.

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

Dust may irritate the respiratory tract, skin and eyes.

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

Treat symptomatically.

5. FIREFIGHTING MEASURES

General information
The product is not flammable. May form combustible dust concentrations in air.

5.1. Extinguishing media

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Apply extinguishing media carefully to avoid creation airborne dust.
Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters: self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special firefighting procedures: move containers from fire area if you can do so without risk.
Specific methods: use standard firefighting procedures and consider the hazards of other involved materials

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Keep unnecessary personnel away. Use only non-sparking tools. Dust deposits should be allowed to accumulate on surface, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate protective equipment and clothing during clean-up.
For emergency responders
Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e. clearing dust surface with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this without risk.
Large spills: wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.
Small spills: sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4. Reference to other sections

For personal protection, see Section 8. For waste disposal, see Section 13 of the SDS.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surface, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces – no smoking. Explosion-proof general and local exhaust ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Thermoplastic processing,

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits
Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Dust	TWA	4 mg/m³ 10 mg/m³	Respiratory dust Total inhalable dust
Methanol (impurity) (CAS 67-65-1)	TWA	260 mg/m³ 200 ppm	

EU. Indicative Exposure Limit Values in Directive 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
Methanol (impurity) (CAS 67-56-1)	TWA	260 mg/m³ 200 ppm

8.2. Exposure controls

Appropriate engineering controls
Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain concentrations of dust particulates below the OEL (occupational exposure limits), suitable respiratory protection must be worn.

Individual protection measures, such as personal protective equipment
General information – personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Eye/face protection – wear safety glasses with side shields (or goggles).
Hand protection – wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Skin protection – wear suitable protective clothing.
Respiratory protection – in case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter.
Thermal hazards – wear appropriate thermal protective clothing, when necessary.
Hygiene measures
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls
Environmental manager must be informed of all major releases.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	solid (filament).
Odour	not available.
Odour threshold	not available.
pH	not available.
Melting point/freezing point	not available.
Initial boiling point and boiling range	not available.
Flash point	not available.
Evaporation rate	not available.
Flammability (solid, gas)	not available.
Flammability limit – lower (%)	not available.
Flammability limit – upper (%)	not available.
Vapour pressure	not available.
Vapour density	not available.
Solubility(ies)	not available.
Partition coefficient (n-octanol/water)	not available.
Auto-ignition temperature	not available.
Decomposition temperature	not available.
Viscosity	not available.
Explosive properties	not explosive.
Oxidizing properties	not oxidizing.

9.2. Other information

Percent volatile < 4% w/w

10. Stability and reactivity

10.1. Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Material is stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under condition of normal use.

10.4. Conditions to avoid

Keep away from heat, sparks and open flame. Contact with incompatible materials.
Minimize dust generation and accumulation.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

General information
Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure
Inhalation – dust may irritate respiratory system.
Skin contact – dust or powder may irritate the skin.
Eye contact – dust may irritate the eyes.
Ingestion – may cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms
Dust may irritate the respiratory tract, skin and eyes.

11.1. Acute toxicity

Components	Species	Test results
Methanol (impurity) (CAS 67-56/1)		
Acute		
Dermal		
LD50	Rabbit	17100 mg/kg
Inhalation		
LC50	Rat	128200 mg/m^3, 4 hours
Oral		
LD50	Rat	1187 – 2769 mg/kg

11.2. Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

11.3. Eye corrosion/irritation

Direct contact with eyes may cause temporary irritation.

11.4. Respiratory sensitization

Not a respiratory sensitizer.

11.5. Skin sensitization

This product is not expected to cause skin sensitization.

11.6. Mutagenicity

No data available to indicate product or any components present at greater than 0,1% are mutagenic or genotoxic.

11.7. Carcinogenicity

Not classifiable as to carcinogenicity to humans.

11.8. Reproductive toxicity

Based on available data, the classification criteria are not met.

11.9. Specific target organ toxicity (single exposure)

Not classified.

11.10. Specific target organ toxicity (repeated exposure)

Not classified.

11.11. Aspiration hazard

Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test results
Methanol (impurity) (CAS 67-56-01)			
Aquatic			
Algae	EC50	Algae	22000 mg/l, 96 hours
Crustacea	EC50	Daphina magna	> 10000 mg/l, 48 hours
Fish	LC50	Lepomis macrochirus	15400 mg/l, 96 hours

12.2. Persistence and degradability

No data available on the degradability of this product.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Not available.

12.6. Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Residual waste
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code
07 02 13
Waste codes should be assigned by the user based on the application for which the product was used.
Disposal methods/information
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Special precautions
Dispose in accordance with applicable regulations.

14. TRANSPORT INFORMATION

14.1. Un number

ADR not regulated as dangerous goods.
RID not regulated as dangerous goods.
ADN not regulated as dangerous goods.
IATA not regulated as dangerous goods.
IMDG not regulated as dangerous goods.

14.2. UN proper shipping name

ADR not regulated as dangerous goods.
RID not regulated as dangerous goods.
ADN not regulated as dangerous goods.
IATA not regulated as dangerous goods.
IMDG not regulated as dangerous goods.

14.3. Transport hazard class(es)

ADR not regulated as dangerous goods.
RID not regulated as dangerous goods.
ADN not regulated as dangerous goods.
IATA not regulated as dangerous goods.
IMDG not regulated as dangerous goods.

14.4. Packing group

ADR not regulated as dangerous goods.
RID not regulated as dangerous goods.
ADN not regulated as dangerous goods.
IATA not regulated as dangerous goods.
IMDG not regulated as dangerous goods.

14.5. Environmental hazard

ADR not regulated as dangerous goods.
RID not regulated as dangerous goods.
ADN not regulated as dangerous goods.
IATA not regulated as dangerous goods.
IMDG not regulated as dangerous goods.

14.6. Special precautions for user

ADR not regulated as dangerous goods.
RID not regulated as dangerous goods.
ADN not regulated as dangerous goods.
IATA not regulated as dangerous goods.
IMDG not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. REGULATORY INFORMATION

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

EU regulations
Regulation (EC) No. 1005/2009, Annex I and II, as amended Not listed
Regulation (EC) No. 850/2004, Annex I as amended Not listed
Regulation (EC) No. 689/2008, Annex I, part 1 as amended Not listed
Regulation (EC) No. 689/2008, Annex I, part 2 as amended Not listed
Regulation (EC) No. 689/2008, Annex I, part 3 as amended Not listed
Regulation (EC) No. 689/2008, Annex V as amended Not listed
Regulation (EC) No. 166/2006, Annex II as amended Not listed
Regulation (EC) No. 1907/2006, REACH Article 59(10) Not listed
Authorizations
Regulation (EC) No. 1907/2006, REACH Annex XIV Not listed
Restrictions on use
Regulation (EC) No. 1907/2006, REACH Annex XVII Not listed
Directive 2004/37/EC Not listed
Directive 92/85/EEC Not listed
Other EU regulations
Directive 2021/18/EU Not listed
Directive 98/24/EC Methanol (impurity) (CAS 67-56-1) Directive 94/33/EC Methanol (impurity) (CAS 67-56-1)
Other regulations
The product is classified and labelled in accordance with EC directives or respective national laws.

This Safety Data Sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended.
National regulations
Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

16. OTHER INFORMATION

16.1. Indication of changes

No additional information.

16.2. Abbreviations and acronyms

CLP: Regulation No. 1272/2008.
DNEL: Derived No-Effect Level.
PNEC: Predicted No Effect Concentration.

16.3. Key literature references and sources for data

The product safety data sheet has been prepared based on the documentation provided by the manufacturer of the granulate from which the filament product was made.

16.4. Relevant R phrases and H statements

H225 – highly flammable liquid and vapour.
H301 – toxic if swallowed.
H311 – toxic in contact with skin.
H331 – toxic if inhaled.
H370 – causes damage to organs.

16.5. Training advice

Follow training instructions when handling this material.

16.6. Further information

To the best of our knowledge, the information contained in this statement is accurate as of the date of publication. The information relates only to the product identified in this document when not used in conjunction with other products or materials. Omni3D Sp. z o.o. makes no warranties, expressed or implied, and assumes no liability in connection with the use of this information.

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