

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form: Mixture
Trade name: add:north PETG Flame Retardant Vo (all colors)
REACH registration exemptions: Exempted from REACH registration
The information in this safety data sheet applies only to the filament, not the spool.

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

1.2.1. Relevant identified uses

Industrial/Professional use spec: Professional uses
Consumer uses

Use of the substance/mixture: Material for FDM/FFF 3D printing.

1.2.2. Uses advised against

In any other than FDM/FFF 3D printing applications, unless separately evaluated for the specific use.

1.3. Details of the supplier of the safety data sheet

Add North 3D AB
Ulricehamnsvägen 11
51462 Ölsremma
SWEDEN
Tel: +4610-7500991
E-mail: info@addnorth.com

1.4. Emergency telephone number

Add North 3D AB: +46703491118

2. Hazards identification

2.1. Classification of the mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Not classified.

This mixture does not meet the criteria for classification in any hazard class under CLP & GHS

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 %

3. Composition/information on ingredients**3.1. Substances**

Not applicable (mixture).

3.2. Mixtures

Substance name	CAS No.	Concentration	Classification (CLP)	H-Phrases
Copolyester	Proprietary	Proprietary	None	None
Phosphorus-Containing organic derivatives	Proprietary	Proprietary	None	None
Additives (colour)	Proprietary	<2%	None	None
<i>Of which: Titanium dioxide (white)</i>	13463-67-7	<1%	None	None

4. First aid measures**4.1. Description of first aid measures**

General first aid measures:

Not expected to present a significant hazard under normal conditions of use. If in doubt, or if symptoms persist, seek medical advice/attention.

Inhalation first aid measures:

Vapours from heated/molten material and dust generated by cutting or grinding may be harmful. Remove the person to fresh air and keep at rest in a position comfortable for breathing. If irritation persists, seek medical advice/attention.

Skin contact (molten material or machine parts):

Immediately cool the affected area with plenty of cold water. Do not attempt to remove solidified material; seek medical attention.

Eye contact:

Rinse cautiously with plenty of cool water for at least 10 minutes, holding eyelids open. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists, seek medical advice/attention.

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

Symptoms/effects after skin contact:

Risk of thermal burns on contact with molten product.

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

Treat symptomatically.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Foam. Water spray. Carbon dioxide. Dry powder.
Unsuitable extinguishing media: Use of heavy stream of water may spread fire

5.2. Special hazards arising from the substance or mixture

Fire hazard : The inhalation of decomposition combustion products may result in health damage. Use water spray or fog for cooling exposed containers. Take action to prevent static discharges.

Explosion hazard: Not explosive as supplied. Fine dust may form explosive mixtures in air.

Hazardous decomposition products in case of fire: Under fire conditions, hazardous fumes will be present: Carbon dioxide, Carbon Monoxide, Acetaldehyde may be released.

5.3. Advice for firefighters

Firefighting instructions : During the fire of the product, keep the safe distance, use suitable breathing protection (isolation device), or self-contained breathing apparatus. Prevent fire fighting water from entering the environment.

Protection during firefighting : Positive pressure self-contained breathing apparatus (SCBA) and structural fire-fighters protective clothing.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures :

No flames, no sparks. Eliminate all sources of ignition. Avoid contact with skin and eyes. Wear recommended personal protective equipment.

6.1.2. For emergency responders

Protective equipment:

Do not attempt to take action without suitable protective equipment.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up:

Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Avoid dust formation. Dispose in a safe manner in accordance with local/national regulations.

6.4. Reference to other sections

See Section 8 and 13 of this safety data sheet.

7. Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling:	Spilled filament on floors may present a slip hazard and should be removed immediately to prevent accidents.
Ventilation of locales:	Ensure good ventilation of the workplace
Handling temperature:	Protect users from possible contact with molten material.
Hygiene measures:	Follow good personal hygiene practices. Do not eat, drink, or smoke when handling this product. Wash hands and exposed areas with mild soap and water before eating, drinking, or smoking and after work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions:	Store in a dry, cool, and well-ventilated place. Protect from moisture; the product is hygroscopic. Keep in the original packaging to maintain product integrity. Avoid direct sunlight. Keep away from sources of heat, sparks, or open flames - No smoking Do not store together with food, drink, or animal feedingstuffs. Keep out of reach of children.
Maximum storage period:	2 year from manufacture.
Storage temperature:	5 - 35 °C

7.3. Specific end use(s)

Material for FDM/FFF 3D-printing.

8. Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Ensure good ventilation when handling in enclosed spaces. Do not breathe vapours. Do not expose the product to temperatures above 290 °C.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Not required under normal use. Wear safety goggles if handling molten material or if dust may form.

8.2.2.2. Skin protection

Hand protection:

Use heat-resistant gloves and suitable protective clothing when handling molten material.

Skin and body protection:

Not required for normal conditions of use

Hand protection:

Not required for normal conditions of use

8.2.2.3. Respiratory protection

Respiratory protection:

Normally not required with adequate ventilation. In case of dust formation, use a P2 particle filter or equivalent. Do not work in an unventilated enclosed space.

8.2.2.4. Thermal hazards

Risk of burns when in contact with molten product.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to drains, surface water, or soil. Observe the usual environmental precautions (see section 6.2).

Other information:

Follow good industrial hygiene practices. Do not eat, drink or smoke during use. Wash hands and other exposed areas with soap and water before leaving work.

9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Solid
Colour:	According to product specification.
Appearance :	Colored plastic wire.
Odour :	Light
Odour threshold:	Not available
Melting point:	Not available
Glass Transition Temperature:	70 °C
Freezing point:	Not available
Boiling point:	Not available
Self-ignition temperature:	Not available
Flammability:	Not available
Explosive properties:	Not explosive.
Oxidising properties:	Non oxidizing.
Lower explosion limit:	Not applicable
Upper explosion limit:	Not applicable
Flash point:	Not applicable
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
pH:	Not available
pH solution:	Not available
Viscosity, kinematic:	Not applicable
Solubility:	Insoluble in water.
Partition coefficient n-octanol/water (Log Kow):	Not available
Vapour pressure:	Not available
Vapour pressure at 50°C:	Not available
Density:	1.2-1.41 g/cm ³
Relative density:	Not available
Relative vapor density at 20 °C:	Not applicable
Particle size:	Not available
Particle size distribution:	Not applicable

9.2. Other information**9.2.1. Information with regard to physical hazard classes**

No additional information available

9.2.2. Other safety characteristics

No additional information available

10. Stability and reactivity**10.1. Reactivity**

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

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid keeping resin molten for excessive periods of time at elevated temperatures. Prolonged exposure will cause polymer degradation. Avoid temperatures above 290°C.

10.5. Incompatible materials

Strong oxidizing agents and strong alkaline compounds.

10.6. Hazardous decomposition products

During thermal decomposition or fire, hazardous decomposition products may be formed, including Carbon dioxide, Carbon monoxide.

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

Acute toxicity (oral) :	Not classified
Acute toxicity (dermal) :	Not classified
Acute toxicity (inhalation) :	Not classified
Skin corrosion/irritation :	Not classified
Serious eye damage/irritation :	Not classified
Respiratory or skin sensitisation :	Not classified
Germ cell mutagenicity :	Not classified
Carcinogenicity :	Not classified
Reproductive toxicity :	Not classified
STOT-single exposure :	Not classified
STOT-repeated exposure :	Not classified
Aspiration hazard :	Not classified

11.2. Information on other hazards**11.2.1. Endocrine disrupting properties****Adverse health effects caused by endocrine disrupting properties**

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

11.2.2. Other information

No additional information available

12. Ecological information**12.1. Toxicity**

Hazardous to the aquatic environment, short-term (acute):	Based on available data, the classification criteria are not met
Hazardous to the aquatic environment, Long-term (chronic):	Based on available data, the classification criteria are not met

12.2. Persistence and degradability

Persistence and degradability:	Not readily biodegradable.
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12.3. Bioaccumulative potential

Bioaccumulative potential:	No bioaccumulation.
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties:

The substance is not included in the list established in accordance with article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having 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

No additional information available

13. Disposal considerations**13.1. Waste treatment methods**

Waste treatment methods:	Dispose of waste in accordance with local and national regulations. The material may be recycled through conventional recycling channels.
Product/Packaging disposal recommendations:	Packaging should be sorted and disposed of according to applicable Local regulations.
Ecological waste information:	Avoid release to the environment.
Additional information:	European Waste Catalogue (EWC codes, guidance only): 16 01 19 - Plastics 15 01 10 - Packaging containing residues of or contaminated by hazardous substances

14. Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
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14.1. UN number or ID number

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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14.2. UN proper shipping name

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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14.3. Transport hazard class(es)

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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14.4. Packing group

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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14.5. Environmental hazards

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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No supplementary information available

14.6. Special precautions for user**Overland transport**

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

15. Regulatory information

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

15.1.1. EU-Regulations

Contains no substances subject to REACH Annex XVII (restrictions)

Contains no substances identified on the REACH Candidate List of Substances of Very High Concern (SVHC)

Contains no substances subject to REACH Annex XIV (Authorisation List)

Contains no substances listed under the POP Regulation (Regulation (EU) No 2019/1021 on persistent organic pollutants)

Contains no substances listed under the PIC Regulation (Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals)

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

16. Other information

Abbreviations and acronyms:

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CAS - Chemical Abstracts Service

CLP - Classification, Labelling and Packaging (Regulation (EC) No 1272/2008)

DNEL - Derived No Effect Level

EC - European Community

EWG - European Waste Catalogue

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

ICAO - International Civil Aviation Organization

IMDG - International Maritime Dangerous Goods Code

OEL - Occupational Exposure Limit

PBT - Persistent, Bioaccumulative and Toxic

PIC - Prior Informed Consent (Regulation (EU) No 649/2012)

PNEC - Predicted No Effect Concentration

POP - Persistent Organic Pollutants (Regulation (EU) 2019/1021)

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

RoHS - Restriction of Hazardous Substances (Directive 2011/65/EU, incl. 2015/863)

SCBA - Self-Contained Breathing Apparatus

STOT - Specific Target Organ Toxicity

vPvB - very Persistent and very Bioaccumulative

Updates version 2.2

Until 1 August 2025, titanium dioxide (TiO₂) was classified as Carc. 2 (inhalation). This classification has been annulled by the European Court of Justice. During mechanical processing (e.g. sanding or cutting), dust may be generated. Appropriate dust control measures should be taken in accordance with applicable occupational health and safety legislation (e.g. AFS 2023:10).

Other information:

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 as amended by Regulation (EU) 2020/878. Labelling elements according to Regulation (EC) No 1272/2008.

The information provided in this Safety Data Sheet is accurate to the best of our knowledge, information and belief at the date of publication. The information is intended solely as guidance for safe handling, use, processing, storage, transportation, disposal and release, and should not be considered a guarantee or quality specification. The information applies only to the specific material designated herein and may be invalid if the material is used in combination with other materials or in any process not specified in this document.