PETG - ENGLISH SDS

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/THE MIXTURE AND THE SOCIETY/COMPANY

1.1 IDENTIFICATION OF THE PRODUCT

Product shape : Native colored polymer
Product name : Nanovia PETG
Products group : Commercial product
Chemical name : POLYETHYLENE TEREPHTALATE GLYCOL

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND DISCONTINUED USES

Relevant identified uses :
Use of the substance/mixture : Pellets / Virucidal filament for thermoplastic injection and additive manufacturing

Not recommended uses :
Employment restrictions : All employment not mentioned above is not recommended.

1.3 INFORMATIONS REGARDING THE SUPPLIER OF THE SAFETY DATA SHEET

NANOVIA
Address : ZA Saint-Paul - 22540 Louargat - France
Tel : +33 (0)2 96 43 36 90
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1.4 EMERGENCY NUMBERS

Emergency number :
The valid emergency phone number in France is the number ORFILA (INRS) : +33 (0)1 45 42 59 59. This number allows to obtain the coordinates of all the french anti-poison centers. These anti-poison and pharmacovigilance grants a free medical help (excluding call charge), 24 hours a day and 7 days a week. To know the valid emergency phone number in your country, please contact the competent local authorities and consult the ECHA (European Chemicals Agency) website : http://echa.europa.eu/help/nationalhelp_contact_en.asp

SECTION 2 : HAZARDS IDENTIFICATION

2.1 CLASSIFICATION IN ACCORDANCE WITH 67/548/CEE OR 1999/45/CE EU GUIDELINES

This product is not classified as a hazardous material.

2.2 LABEL NONE

2.3 OTHER HAZARDS

Other non-classified hazards : When used in thermoplastic injection or additive manufacturing, the product is heated. A potential release of ultrafine plastic particles and/or heat may occur.
Long term inhalation could possibly be harmful.

SECTION 3 : INFORMATIONS ON THE COMPONENTS

3.1 SUBSTANCES

Not applicable

3.2 MIXTURES

POLYETHYLENE TEREPHTALATE GLYCOL : 98-100%
Colouring agent : 0-2%
Non hazardous material.

SECTION 4 : FIRST AID

4.1 FIRST AID

In the normal conditions of use, this material is not hazardous. In the following cases, consult a doctor and show him this safety data sheet.

First aid after inhalation : Consult a doctor if respiratory symptoms appear or persist.
When used in 3D printers, the product is heated. Refer to the advice of the printer manufacturer.
When used in thermoplastic injection, refer to the conditions for industrial use of injection moulding machines.

First aid after skin contact :
A skin contact is not reasonably foreseeable. No particular measurement is necessary. In case of doubt, consult a doctor.
When used in 3D printers, the product is heated. Refer to the advice of the printer manufacturer.
When used in thermoplastic injection, refer to the conditions for industrial use of injection moulding machines.

First aid after ocular contact :
An ocular contact is not reasonably foreseeable. No particular measurement is necessary. In case of doubt, consult a doctor.
When used in 3D printers, the product is heated. Refer to the advice of the printer manufacturer.
When used in thermoplastic injection, refer to the conditions for industrial use of injection moulding machines.

First aid after ingestion :
For the product in filament : The ingestion is not a reasonably foreseeable route of exposure for this product. In case of doubt, consult a doctor.
For the product in pellets : If the person is conscious, rinse the mouth with water. Do not induce vomiting without medical advice. Immediately consult a doctor.

4.2 SYMPTOMS AND ACUTE OR CHRONIC EFFECTS

Symptoms/effects after inhalation : When using thermoplastic injection or in additive manufacturing, the product is heated. A potential release of ultrafine plastic particles and/or smoke emission could occur. Long term inhalation could possibly be harmful.

Symptoms/effects after skin contact : When using thermoplastic or in additive manufacturing, a risk of thermal burn is possible.

SECTION 5 : MEASURES IN CASE OF FIRE

5.1 FIRE EXTINGUISHING METHODS

Appropriate fire extinguishing methods : Sprayed water with additives, chemical powder, chemical foam, C02 fire extinguisher
Non appropriate extinguishing agents : Water jet stick

5.2 PARTICULAR HAZARDS ARIZING FROM THE SUBSTANCE OR MIXTURE

Responsiveness in case of fire : May burn in a fire by releasing a thick toxic smoke
Hazardous decomposition products in case of fire : The fire will cause a thick black smoke containing hazardous combustion products. Do not inhale the fumes.

5.3 ADVICE TO THE FIREFIGHTERS

Protection in case of a fire : Do not enter the fire zone without protective equipment, including a respiratory protection.
Other information : Cool the packaging exposed to the heat or the flames with sprayed water.

SECTION 6 : MEASURES IN CASE OF ACCIDENTAL SPILLAGE

6.1 INDIVIDUAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURE

General measures : If an accident occurs when using a 3D printer or with an injection moulding machine, air the room and use protective equipment adapted to the situation. The spilled material can lead to a slippery surface hazard.

6.1.1. For the non-first-aiders

Protective equipment : Personal protection : see section 8
Emergency procedures :

- For the filament product : In case of accidental spillage, pick up the filament spools and check their condition before use. The accidental spillage does not generate any dangerous situation related to the product itself. If an accident occurs when used with a 3D printer, refer to the advice of the printer manufacturer.
- For the pellets product : In case of accidental spillage, sweep and tidy up the pellets. The accidental spillage does not generate any dangerous situation related to the product itself. If an accident occurs when used, refer to the advice of the injection moulding machine manufacturer.

6.1.2. For the first-aiders

Protective equipment : Personal protection : see section 8
Emergency procedures :

- For the filament product : In case of accidental spillage, pick up the filament spools and check their condition before use. The accidental spillage does not generate any dangerous situation related to the product itself. If an accident occurs when used with a 3D printer, refer to the advice of the printer manufacturer.
- For the pellets product : In case of accidental spillage, sweep and tidy up the pellets. The accidental spillage does not generate any dangerous situation related to the product itself. If an accident occurs when used, refer to the advice of the injection moulding machine manufacturer.

6.2 PRECAUTIONS FOR THE PROTECTION OF THE ENVIRONMENT

Do not dispose of in natural waterways, sewage systems or the soil.

6.3 METHODS AND LOCKDOWN AND CLEANING MATERIAL

For retention : Appropriate advice regarding the lockdown of a spill ; the following lockdown methods are possible :

- For the filament product : Pick up the filament spools and check their condition before use. Dispose of in accordance with regulations.
- For the pellets product : Sweep and tidy up the pellets. Dispose of in accordance with regulations.

Cleaning procedures : For cleaning : Wash the contaminated area while making sure not to contaminate the natural environment. During the cleaning operations, continue observing the handling precautions.

6.4. REFERENCE TO OTHER SECTIONS

Information regarding the handling, see section 7. Information regarding the personal protective equipment, see section 8. Information regarding disposal, see section 13.

SECTION 7 : HANDLING AND STORAGE

7.1 PRECAUTIONS TO BE TAKEN FOR A SAFE HANDLING

Additional hazards during treatment :
Ensure proper ventilation.
During use, a potential release of ultrafine plastic particles and/or smoke may occur.
Long term inhalation may potentially be harmful. It can be necessary to have a printing chamber enclosure with a specific filter.
When used in 3D printers : refer to the advice of the printer manufacturer
When used in thermoplastic injection moulding : refer to the injection moulding machines industrial terms of use.

Precautions to take for a safe handling : Refer to the advice of the printer or injecting moulding machine manufacturer.

Handling temperature : Consult the technical sheet. When used in 3D printers : refer to the advice of the printer manufacturer. When used in thermoplastic injection : refer to the injection moulding machines industrial terms of use.

Hygiene measures : Use the individual protective equipment (suitable gloves, splash-proof glasses, suitable work clothes) in accordance with good industrial hygiene practices (see section 8).

7.2 STORAGE CONDITIONS AND POSSIBLE INCOMPATIBILITIES

Storage conditions :

- Storage conditions ensuring safety : Preserve in sealed original packaging in a well-ventilated place. Avoid extreme temperatures (heat and cold).

- For more details on storage conditions ensuring quality : Consult the specification sheet.

Incompatible products : Oxidizing agent. Strong acids. Strong bases.
Place of storage : Store in a well-ventilated area.
Special requirements regarding packaging : Preserve in the sealed original packaging.

7.3. FINAL USE

See technical sheet.

SECTION 8 : EXPOSURE CONTROLS / STAFF PROTECTION

8.1. CONTROL SETTINGS

Not applicable

8.2 EXPOSITION CONTROL

8.2.1. Suitable technical controls

Suitable technical controls :
Use the injection moulding machines and the 3D printers in a well-ventilated room.
When used in 3D printers : refer to the advice of the printer manufacturer
When used in thermoplastic injection moulding : refer to the injection moulding machines industrial terms of use.

8.2.2. Individual protective equipment

8.2.2.1. Eyes and face protection

Ocular protection : Under normal use and reasonably foreseeable : Does not require specific or particular technical measures.
For industrial processing : goggles with side protection (complies with standard EN 166).

8.2.2.2. Skin protection

Hand protection :
Under normal use and reasonably foreseeable : Does not require specific or particular technical measures.
For industrial processing :
It is recommended that the gloves are made with the following materials :
Rubber (naturel, latex). Chloroprene rubber. Butyl rubber. Polyvinyl chloride (PVC).
Thickness : 0.5 mm
Breakage time : > 480 minutes.
Complies with standard EN 374.
Refer to the advice of the printer manufacturer or the injection moulding machine manufacturer.

8.2.2.3 Respiratory tract protection

Respiratory tract protection :
Under normal use reasonably foreseeable, non industrial, this product does not require respiratory protective equipment.
Use injection moulding machines and 3D printers in a well-ventilated room.
Under industrial use, it can be necessary to have a print chamber enclosure with a specific filter.
When used in 3D printers : refer to the advice of the printer manufacturer.
When used in thermoplastic injection moulding : refer to the injection moulding machines industrial terms of use.
If there is insufficient ventilation, plan to use a suitable respiratory protective mask. Mask with vapour-barrier/gas/type A/B/P3 dust filter (complies with standard EN 141 et EN 143).

8.2.2.4. Thermal risks protection

Protection against thermal hazards :
The molten material must not be in contact with skin to which it can adhere and cause burns. Refer to the advice of the printer manufacturer or the injection moulding machine manufacturer.

8.2.3. Environment exposure control

Environment exposure control :
Avoid the disposal into natural waters, sewage systems or the soil
Consumer exposure control : Remove contaminated clothing and wash them before reuse. Wash hands after working with the product.
Other information : Do not eat, do not drink and do not smoke during use.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. ESSENTIAL PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Color	Translucid or colored.
Appearance	Spools packed in individual boxes or pellets.
Solubility	Insoluble in water.
Density	1,29 g/cm3.
Tg	80°C

9.2 OTHER INFORMATION

Refer to the technical sheet

9.2.1. Information regarding physical hazard classes

No additional information available

9.2.2. Other safety features

No additional information available

SECTION 10 : STABILITY / RESPONSIVENESS

10.1. RESPONSIVENESS

Responsiveness related to substances, containers and contaminants to which the substance or mixture may be exposed during transport, storage and use : No data available.

10.2. CHEMICAL STABILITY

The product is stable in the normal conditions of use. Stability of the substance or mixture under normal and foreseeable storage and handling conditions, with regard to temperature and pressure : Chemically stable under standard ambient conditions (room temperature).

10.3. POTENTIAL SIDE EFFECTS

Reaction or polymerisation of the substance or mixture releasing excessive pressure or heat or generating other hazardous conditions : This product will not polymerise releasing excessive pressure or heat or generating other hazardous conditions. (See section 10.1 for reactivity that may generate hazards considering the substances, containers and contaminants to which the substance or mixture may be exposed during transport, storage and handling.) (See section 10.1 for reactivity that may generate hazards, taking into account the substances, containers and contaminants to which the substance or mixture may be exposed during transport, storage and use.)

10.4. CONDITIONS TO AVOID

List of conditions, such as temperature, pressure, light, shock, electrostatic discharge, vibration or other physical stresses, which could give rise to a hazardous situation. Keep away from open flames, hot surfaces and sources of ignition. Avoid temperatures above 260°C.

10.5. INCOMPATIBLE MATERIALS

Families of substances or mixtures, or specific substances, such as water, air, acids, bases, oxidizing agents, with which the substance or mixture could react, creating a hazardous situation : Strong oxidizing agents, strong acids and strong bases.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Known hazardous decomposition products and products that can reasonably be expected as a result of use, storage, spillage and heating : This product does not decompose under normal conditions. Decomposition products in the event of fire : see section 5.2.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON THE HAZARD CLASSES AS DEFINED IN THE REGULATIONS (CE) N° 1272/2008

ACUTE TOXICITY (ORAL) : Unclassified

ACUTE TOXICITY (CUTANEOUS) : Unclassified

ACUTE TOXICITY (INHALATION) : Unclassified

Additional indications : To our knowledge (and taking into account its composition) this product isn't classified in this hazard category

SKIN CORROSION/IRRITATION : Unclassified

Additional indications : To our knowledge (and taking into account its composition) this product isn't classified in this hazard category

SEVERE EYE DAMAGE / EYE IRRITATION : Unclassified

Additional indications : To our knowledge (and taking into account its composition) this product isn't classified in this hazard category

RESPIRATORY OR SKIN SENSITISATION : Unclassified
Additional indications : To our knowledge (and taking into account its composition) this product isn't classified in this hazard category
GERM CELL MUTAGENICITY : Unclassified
Additional indications : To our knowledge (and taking into account its composition) this product isn't classified in this hazard category
CARCINOGENICITY : Unclassified
Additional indications : To our knowledge (and taking into account its composition) this product isn't classified in this hazard category
REPRODUCTIVE TOXICITY : Unclassified
Additional indications : To our knowledge (and taking into account its composition) this product isn't classified in this hazard category
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) : Unclassified
Additional indications : To our knowledge (and taking into account its composition) this product isn't classified in this hazard category
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) : Unclassified
Additional indications : To our knowledge (and taking into account its composition) this product isn't classified in this hazard category
DANGER IF SWALLOWED : Unclassified
Additional indications : To our knowledge (and taking into account its composition) this product isn't classified in this hazard category
INFORMATION ON LIKELY ROUTES OF EXPOSURE :
Skin contact : When used in thermoplastic injection moulding or in additive manufacturing. A risk of thermal burn is possible
Eye contact : An eye contact is not reasonably foreseeable.
Inhalation : When used in thermoplastic injection moulding or in additive manufacturing, the product is heated.
A potential release of ultrafine plastic particles and/or smoke may occur.
Long term inhalation may potentially be harmful.
Ingestion : The ingestion is not a route of exposure that is reasonably foreseeable for this product.

11.2. INFORMATION ABOUT OTHER HAZARDS

11.2.1 Endocrine-disrupting properties

No additional information available

11.2.2 Other information

No additional information available

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity
Given the molecular structure of the material, there is a very high probability that the product is not toxic to aquatic organisms.
12.2. Persistence and biodegradability
No additional information available
12.3. Bioaccumulation potential
No additional information available
12.4. Mobility in soils
No additional information available
12.5. PBT and vPvB results
No additional information available
12.6. Endocrine disrupting properties
No additional information available
12.7. Other adverse effects
Avoid release into the environment
The mixture does not contain any substance known to have adverse effects on the environment due to endocrine-disrupting properties.

SECTION 13 : DISPOSAL

13.1 WASTE TREATMENT METHODS

Waste treatment methods : Recycle or destroy in accordance with applicable local/national safety regulations

Recommandations for treating the product/packaging : They must be recycled or disposed of in accordance with local regulations in force. The cardboard spool is recyclable.

Additional indications :

It is recommended to avoid or reduce waste production as much as possible.

The disposal of this product, solutions and by-products must always comply with legal requirements regarding environmental protection and waste disposal, as well as the requirements of all local authorities. Dispose of an excess and non-recyclable products through an authorised waste collection company. Do not dispose of untreated waste in drains.

Dispose of this product and its container with all due care. Handle empty containers with care if they have not been cleared or rinsed. Empty containers or inner bags may retain product residues. Avoid spillage of materials and prevent them from flowing into drains, sewers and watercourses.

SECTION 14 : TRANSPORT INFORMATION

ADR (Road) RID (Railway) IMDG (maritime) and IATA (air) regulation

Classification : not classified as hazardous material

ONU LABEL : NONE.

SECTION 15 : REGULATORY INFORMATION

15.1. REGULATIONS/LEGISLATION SPECIFIC TO THE SUBSTANCE OR MIXTURE IN TERMS OF SAFETY, HEALTH AND THE ENVIRONMENT

15.1.1. EU regulations

- Does not contain any substances from the REACH candidate list
- Does not contain any substances listed in ANNEX XIV of REACH
- Does not contain any substances subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals.

Does not contain any substances subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants.

15.1.2. National guidelines

Ensure that all national or local regulations are complied with.

15.2 CHEMICAL SAFETY ASSESSMENT

No additional informations available

SECTION 16 : OTHER INFORMATIONS

The content and format of this safety data sheet comply with Regulation (EC) NO. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). This sheet supplements the technical data sheets but does not replace the qualities described. The information it contains is based on our suppliers' knowledge of the product concerned at the time of writing. It is provided in good faith. The list of regulatory requirements and applicable precautions is intended solely to assist the user in fulfilling their obligations when using the product. It is not exhaustive and does not exempt the user from any new obligations applicable to the possession or specific use of the product, and the user remains solely responsible for conducting the risk analysis required before using the product. The user's attention is drawn to the risks that may be incurred when a product is used for purposes other than those for which it is designed.

Training advice :

The use of 3D printers and injection moulding machines requires specific training. Refer to the printer manufacturer's instructions.