

#### 1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

- 1.1. Identifcation of the substance or preparation:
  Rigid X 3D printing filament; all colors. The information in this SDS is applicable only to the PLA filament material, not the spool itself
- **1.2.** Use of the substance or preparation:

FDM/FFF 3D printing

**1.3.** Company identification:

Add North 3D AB Ulricehamnsvägen 11 51462 Ölsremma SWEDEN

Tel: +46709109787 E-mail: <u>info@addnorth.com</u>

**1.4 Emergency telephone:** 

Add North 3D AB: +46709109787

#### 2. HAZARDS IDENTIFICATION

- 2.1. Classification
- 2.2. Label elements

The material is not hazardous according to EC 1272/2008 and GHS

Health hazards: Not hazardous Environmental hazards: Nor hazardous Hazard symbol: None Signal Word: None Hazard Statement: None Precautionary statement: None PBT & vPvP substances: Material does not contain PBT & vPvB substance

Safety datasheet conform regulation (EC) 2015/830			Page	1
Revision	1.0	Revision date:	4 September, 2019	
Replaces version of	N/A			



#### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

- 3.1. Description
- **3.2.** Ingredients

The material is a mixture of chemical substances in a solid polymer matrix

Substance name	CAS number	Concentration	Classification	H-phrases
PETG	Proprietary	Propietary	None	None
Carbon fiber	Proprietary	Propietary	None	None

#### 3.3. Additional information

The material does not contain substances fulfilling the criteria of hazard classification

4.	FIRST AID MEASURES		
	4.1. Skin contact	If burned by contact with molten material, cool down water for at least 10 minutes. In case of severe burns, not remove molten material from skin and consult a physician.	
	4.2. Eye contact	Not likely due to physical state. Grinding or pelletizing of filament may lead to dust particles which can cause eye irritation. Wash with plenty of water and get medical attention if symptoms persist.	
	4.3. Inhalation	Not likely due to physical state, get medical attention.	
	4.4. Ingestion	Not likely due to physical state. Material is not expected be absorbed by gastrointestinal – no first aid measures necessary.	
5.	FIRE FIGHTING MEASURES		
	5.1. Extinguishing media		Water mist, carbon dioxide, foam, dry powder
	5.2. Extinguishing media not used for safety reasons	to be	High pressure water jet

Safety datasheet confo	rm regulation (EC) 2015/	830	Page	2
Revision	1.0	Revision date:	4 September, 2019	
Replaces version of	N/A			



5.3. Special hazards arising from the mixture

fighters

Thermal decomposition and burning may release oxides of carbon and nitrogen, hydrocarbons and ammonia

5.4. Protective equipment for fire Use full protective clothing for chemicals and a self-contained breathing apparatus

### 6. ACCIDENTAL RELEASE MEASURES 6.1. Personal precautions No measures required 6.2. Environmental precautions Material not regarded as dangerous for the environment 6.3. Cleanup, containment and Sweep up dust or particles or pieces of disposal of spill filament by scoop or vacuum. Dispose of material in suitable container according to local regulations, or via RE-ADD if applicable 6.4. Reference to other sections See section 8 and 13 7. HANDLING AND STORAGE 7.1. Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke at the workplace. Avoid dust formation by cutting or grinding. During printing, ensure good ventilation and local exhaust. 7.2. Conditions for safe storage To ensure technical integrity of the product store in the original container/box and keep at temperatures below 50°C and in a dry place. Protect from moisture, product is hygroscopic 7.3. Specific use Under anticipated conditions of use, no further measures are required. No available exposure scenarios.

Safety datasheet conform regulation (EC) 2015/830			Page	3
Revision	1.0	<b>Revision date:</b>	4 September, 2019	
Replaces version of	N/A			



## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Replaces version of** 

N/A

Revision 1.0	Revision date: 4 September, 2019	<u> </u>
Safety datasheet conform regulation (EC) 2015/830	Page	4
9.2. Important health, safety and environmental information		
Density Odour	>1 g/cm³ Slight	
9.1. General information		
9. PHYSICAL AND CHEMICAL PROPERTIES		
Environmental exposure controls	Do not allow product to enter drains, water courses or soil	
Hygiene measures	Handle in accordance with good industrian hygiene and safety practice. Do not eat, drink or smoke when using this product	al
Respiratory protection	Not required (for FDM printing)	
Skin protection	Not required (for FDM printing)	
Eye protection Hand protection	Not required (for FDM printing) Not required (for FDM printing)	
Appropriate Engineering Controls Individual protection measures	Keep at temperatures below 240°C (464°F). Ensure adequate ventilation in confined areas	
8.2. Exposure controls		
Derived No Effect Level	No information available	
Recommended monitoring procedures	No information available	
Biological limit values	Not established	
Exposure limits	Material contains no substances with occupational exposure limit values	
8.1. Control parameters		



Auto flammability>400°CBulk densityN/AMelting pointN/ApH-valueN/AViscosityN/AFlashpointNon-volatile burning solidSolubility in waterInsoluble
Melting pointN/ApH-valueN/AViscosityN/AFlashpointNon-volatile burning solid
pH-valueN/AViscosityN/AFlashpointNon-volatile burning solid
Viscosity N/A Flashpoint Non-volatile burning solid
Flashpoint Non-volatile burning solid
Solubility in water Insoluble
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Vapour pressure N/A

#### **10. STABILITY AND REACTIVITY**

10.1. Reactivity	Not reactive under normal handling conditions
10.2. Chemical stability	Stable for handling under normal handling conditions
10.3. Possibility of hazardous reactions	No hazardous reactions with other chemicals known, under normal handling conditions
10.4. Conditions to avoid	Do not grind, pelletize or mill the material. Avoid temperatures above 290°C
10.5. Incompatible materials	Aviod water which can cause degradation of material. Material can react with strong oxidizers
10.6. Hazardous decomposition products	Hazardous decomposition products may form under fire conditions: carbon dioxide, acetaldehyde

#### **11. TOXICOLOGICAL INFORMATION**

LD 50 (Rat oral)	Not tested (not to be expected)
Skin irritation	Not tested (not to be expected)
Eye irritation	Not tested (not to be expected)
Skin sensitation	Not tested (not to be expected)
Respiratory sensitation	Not tested (not to be expected)
CMR effects	Non of the ingredients is listed as CMR substance

Safety datasheet conform regulation (EC) 2015/830			Page	5
Revision	1.0	<b>Revision date:</b>	4 September, 2019	
Replaces version of	N/A			



#### **General remarks**

No harmful or toxic effects have been reported to date. The caprolactam may cause slight irritation to the skin and eyes via excessive exposure. Information listed in this section is transferred from safety data from the ingredients of this product.

#### **12. ECOLOGICAL INFORMATION**

No information available
Minimal degradation
No information available, unlikely
No information available
Product does not contain PBT or vPvB substances
No adverse effects known to date
The material is non soluble in water and solid. Therefore, under environmental conditions, no detrimental effects on plants, animals and micro-organisms are to be expected

#### 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods	Dispose of in accordance with local regulations, or within RE-ADD (if applicable)
13.2. Additional information	N/A
13.3. Packaging	Dispose of in accordance with local

#### 14. TRANSPORT INFORMATION

Safety datasheet conform regulation (EC) 2015/830			Page	6
Revision	1.0	Revision date:	4 September, 2019	
Replaces version of	N/A			

regulations



14.1.RID / ADR		Not listed / free	
14.2.UN-NR		Not listed / free	
14.3.ICAO / IATA-DGR		Not listed / free	
14.4. GGVSEE / IMDG-CODE		Not listed / free	
15. REGULATORY INFORMATIO	Ν		
15.1.Safety, health and envi regulations specific for substance or mixture			
Restrictions of use		None	
Other regulation		No information available	
15.2. Chemical safety assessment		A safety assessment is not required	
16. OTHER INFORMATION			
Relevant H-phrase:	None		
Changes compared to previous version:	N/A		
Abbreviations:	REACH: Registration, Evaluation, Authorisation and restriction of chemical substances EC: European Community STOT: Specific Target Organ Toxicity PBT: Persistent, Bioaccumulating, Toxic vPvB: very Persistent, very Bioaccumulating ADR: Accord européen relative au transport international des marchandises Dangereuses per Route ADN: Accord européen relative au transport international des marchandises Dangereuses per voies de Navigation intérieures RID: Regulations for the international Transport of dangerous goods by rail IMDG: International maritime dangerous goods code ICAO: International civil aviation organization		

Safety datasheet conform regulation (EC) 2015/830			Page	7
Revision	1.0	Revision date:	4 September, 2019	
<b>Replaces version of</b>	N/A			



This safety datasheet complies with the requirements of EC 1907/2006 and regulation EC 2015/830. Label element according to regulation EC 1272/2008.

Disclaimer

The information provided in the safety datasheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information only relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Safety datasheet conform regulation (EC) 2015/830			Page	8
Revision	1.0	Revision date:	4 September, 2019	
Replaces version of	N/A			