# Safety Data Sheet

# **SECTION 1: Identification of the Product and the Company**

# 1.1. Product identifier

Trade nar	ne:
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1.75mm ASA filament
2.85mm ASA filament
3.00mm ASA filament

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

#### Relevant identified uses of the substance or mixture

Use: Thermal processing during 3D printing.

# 1.3. Details of the supplier of the safety data sheet

Manufacturer:	Devil Design Ryszka Mateja Sp. J.	
	ul. Żwirki i Wigury 65	
	43-190 Mikołów, Poland	
	Tax ID: 6351837318	
	E-mail: office@devildesign.com	

# **SECTION 2: Hazard identification**

# 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

Skin sensitisation, category 1

H317: May cause an allergic skin reaction

Data based on the properties of the ingredient(s) of the mixture.

#### 2.3. Other hazards

Choking risk. Inhalation of gases and vapours generated during processing is irritating to the respiratory system. Gases and vapours generated during processing are irritating to the skin and eyes.

# **SECTION 3: Composition and Information on Ingredients**

## 3.2. Mixtures

Composition:	2-propenoic acid, butyl ester, polymer with etenylbenzene and 2- propenenitrile, stabilising agents
Chemical name:	Acrylonitrile-styrene-acrylate copolymer
Common name:	ASA
Type of plastic:	Thermoplastic
CAS number:	26299-47-8

Data based on the properties of the ingredient(s) of the mixture. They can slightly differ, depending on the dye used.

# **SECTION 4: First Aid Measures**

4.1. Description of first aid measures				
General information:	No special measures are required.			
Skin:	After contact with the molten product, immediately rinse the area of contact with plenty of water for at least 15 minutes. Consult a doctor.			
Eyes:	May cause eye irritation and corneal damage due to mechanical action. Immediately rinse the eyes with plenty of water for at least 15 minutes. Consult a doctor.			
Inhalation:	May cause irritation of the respiratory system – expose to fresh air. Immediately consult a doctor.			
Ingestion:	If ingested, do not induce vomiting. Immediately consult a doctor.			

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

Unknown.

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

In case of any alarming symptom or accident, immediately consult a doctor.

# **SECTION 5: Firefighting Measures**

## 5.1. Extinguishing media

#### Suitable extinguishing media:

Water spray Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

#### Unsuitable extinguishing media

Suitable distinguishing media should be applied depending on the ambient conditions.

## 5.2. Special hazards arising from the substance or mixture

#### Hazards combustion hazards:

Bicarbonates Monomers Oligomers Styrene Aldehydes Carbon oxide (CO) Carbon dioxide (CO<sub>2</sub>) Nitrogen oxides (NO<sub>x</sub>) Sulphur oxides Acetone Alcohols Hydrogen cyanide

# 5.3. Advice for firefighters

Personal safety equipment for firefighters:

Self-contained breathing apparatus

# **SECTION 6: Accidental Release Measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

#### **Protective equipment:**

Use personal respiratory protection equipment during exposure to gases and vapours. Use personal safety equipment (see SECTION 8).

#### **Emergency procedures:**

Remove the source of ignition. Avoid contact with skin and eyes. Avoid inhalation of gases and vapours.

#### 6.1.2. For emergency personnel

Use personal respiratory protection equipment during exposure to gases and vapours. Personal safety equipment (see SECTION 8).

## 6.2. Environmental precautions

Do not allow the product to reach sewerage systems or surface and ground waters.

#### 6.3. Methods and material for containment and cleaning up

Remove mechanically.

#### 6.4. Reference to other sections

Personal safety equipment – see SECTION 8. Waste disposal – see SECTION 13.

# **SECTION 7: Handling and Storage**

#### 7.1. Precautions for safe handling

#### Handling of the substance or preparation:

The product should be processed in a well ventilated environment. If required, an air exhaust should be installed.

## General workplace health and safety rules:

Do not eat or drink when working with the product, do not smoke in the workplace. Wash your hands after contact with the product.

# 7.2. Conditions for safe storage, including any incompatibilities

# Technical equipment and storage conditions:

Avoid storage of the product at high temperatures. Avoid all sources of ignition: high temperature, sparks, open fire. Store the product in a dry, dark and well ventilated place, at ambient temperature. Due to quality reasons, protect the product against moisture, dust and contamination.

## Storage with other substances/preparations:

See SECTION 10.4.

No specific rules have been issued for the storage of the product with other substances/preparations.

# 7.3. Specific end use(s)

No specific recommendations issued.

# **SECTION 8: Exposure Controls/Personal Protection**

# 8.1. Control parameters

Data lacking

The product may release particulates not otherwise classified (PNOCs).

DNEL/DMEL values:Data lacking.PNEC values:Data lacking.

The indicated values are based on known properties of the mixture's ingredient(s).

#### 8.2. Exposure controls

General protection rules:The product should be processed in a well ventilated room; If<br/>required, an air exhaust should be additionally installed.<br/>Comply with Directive 89/686/CEE and its amendments.

Eyes and face:	Wear protective goggles.
Hands:	Wear protective gloves.
Respiratory:	In case of exposure to dust/vapours, use respiratory protection with anti-dust filter. Use EU8 compliant equipment.

# **SECTION 9: Physical and Chemical Properties**

# 9.1. Information on basic Physical and Chemical Properties

Physical form:	Solid
Appearance:	Wire
Colour:	Natural (milky) and, depending on the dye used, it
	can be light orange, orange, red, dark blue, green,
	aluminium (silver), black.
Odour:	Irritant during processing
Odour threshold:	Data lacking
pH value:	Neutral
Melting point:	>80°C
Boiling point:	Not applicable
Evaporation rate:	Not applicable
Flammability:	Data lacking
Upper/lower flammability limit:	Data lacking
Vapour pressure:	Not determined
Vapour density:	Not determined
Relative density:	1.07
Water solubility:	Data lacking
Solubility in other liquids:	Data lacking
n-octanol/water partition	
coefficient:	Data lacking
Self-ignition point:	Data lacking
Thermal decomposition:	See: SECTION 10.4.
Viscosity:	Data lacking
Explosive properties:	Data lacking
Oxidising properties:	Data lacking
Molecular weight:	50,000 ~ 250,000

Depending on the colour of the product, its physical and chemical properties may slightly vary.

# 9.2. Other information

Surface tension:	Data lacking
Thermal conductivity:	Data lacking
Electrical conductivity:	Data lacking

# **SECTION 10: Stability and Reactivity**

#### 10.1. Reactivity

Data not available. See SECTION 10.3.

#### 10.2. Chemical stability

The product remains stable under recommended storage conditions. See SECTION 7.2.

#### **10.3.** Possibility of hazardous reactions

No dangerous reactions are known under recommended operational conditions.

#### 10.4. Conditions to avoid

Temperatures above 60°C. Electrostatic discharge. Working with the product in poorly ventilated rooms.

#### **10.5.** Incompatible materials

Strong oxidisers.

#### **10.6.** Hazardous decompositions products

No decomposition or products are not known under recommended storage conditions. Gaseous degradation products can be released if the product is highly overheated. Flammable vapour may occur, also see SECTION 5.2.

# **SECTION 11: Toxicological Information**

# 11.1. Information on toxicological effects

Acute toxicity: Skin: Data lacking Mouth: LD50 >5.000mg/kg (rat) The product has not been tested. The indicated value is based on known properties of the mixture's ingredient(s).

Skin irritation: May be irritating to the skin.

**Eye irritation:** May be irritating to the eyes.

Sensitisation: Data lacking

Mutagenicity: Data lacking

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Effect on living organisms: Data lacking

# **12.2.** Persistence and degradability

Data lacking

# 12.3. Bioaccumulative potential

Data lacking

# 12.4. Mobility in soil

Data lacking

# **12.5.** Results of PBT and vPvB assessment

Data lacking because/or no CSR report is required.

# 12.6. Other adverse effects

See: SECTION 6.2.

# **SECTION 13: Disposal Considerations**

# 13.1. Waste treatment effects

Do not discharge waste to sewerage systems, soil or water reservoirs. Dispose of waste in accordance with locally applicable regulations. The same applies to packaging.

# **SECTION 14: Transport Information**

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Sections 14.1. to 14.5. IMDG: Data lacking ICAO\IATA: Data lacking ADR\RID: Data lacking 14.C. Special processions for upon

14.6. Special precautions for user

See SECTIONS 6, 7 and 8.

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

Data lacking

# **SECTION 15: Regulatory Information**

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

Devil Design Ryszka Mateja Sp. J. has made every effort to ensure that the information contained in this document is accurate and, to its best knowledge, true. At the same time, Devil Design Ryszka Mateja Sp. J. disclaims all liability for the use of such information. The product has not been tested, and the indicated values are based on the details of the mixture's ingredient(s). Depending on the specific properties of the product, including in particular its colour, the physicochemical properties may vary; the data sheet specifies extreme values that are known. Each user is obliged to use the product in accordance with locally applicable laws.

Applicable laws: Journal of Laws of 2011 No. 63 item 322; Journal of Laws of 2009 No. 20 item 106; Journal of Laws of 2012 No. 0 item 1018 as amended; restructured European Agreement concerning the International Carriage of Dangerous Goods by Road ADR; Journal of Laws 04.96.959 as amended; Journal of Laws of 2003 No. 169 item 1650.

#### 15.2. Chemical safety assessment

Data lacking

# **SECTION 16: Other Information**

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