

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 03.18.2022 Page 1 of 12

Nylon 11

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product Name: Nylon 11 Product code: FLP11G01

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

**Relevant identified uses:** For use in Formlabs Fuse Printers **Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

1.3 Details of the manufacturer/supplier of the safety data sheet

Manufacturer:Supplier:United StatesGermanyFormlabs, IncFormlabs GmbH35 Medford StNalepastr. 18Suite 201 Somerville, MA 02143Berlin, . 12459+1 617 855 0762+49 30 555 795 880

sds@formlabs.com

#### 1.4 Emergency telephone number:

**United States** 

CHEMTREC

1-800-424-9300 (24/7)

#### SECTION 2: Hazard(s) identification

#### 2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 (CLP): The substance is not classified as

hazardous according to the Globally Harmonized System (GHS).

Hazard-determining components of labeling: None

Additional Information: None

2.2 Label elements

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

Hazard pictograms: None

Signal Word: None

Hazard statements: None

Precautionary statements: None

2.3 Other hazards: None known

#### SECTION 3: Composition/information on ingredients

#### 3.1 Substance:

Identification	EU REACH Registration No.	Name	according to Regulation (EC) No.	Weight %
1			1272/2008 (CLP)	

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 03.18.2022 Page 2 of 12

#### Nylon 11

CAS number: 25587-80-8 EC number: Not Applicable	-	Polyundecanamide	Not classified	<100
CAS number: 1333-86-4 EC number: 215-609-9	-	Carbon Black	Carc. 2; H351	<1

**3.2 Mixture:** Not applicable. **Additional information:** None

Full Text of H and EUH statements: See section 16

#### **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

#### **General notes:**

Not determined or not available.

# Following inhalation:

Not determined or not available.

# Following skin contact:

Not determined or not available.

#### Following eye contact:

Not determined or not available.

#### Following ingestion:

Not determined or not available.

#### Self-Protection of the first aider:

Not determined or not available.

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

Acute symptoms and effects: Not determined or not available.

# **Delayed symptoms and effects:**

Not determined or not available.

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

#### **Specific treatment:**

Not determined or not available.

#### Notes for the doctor:

Not determined or not available

# **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media

#### Suitable extinguishing media:

Not determined or not applicable.

#### Unsuitable extinguishing media:

Not determined or not applicable.

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

Not determined or not applicable.

#### 5.3 Advice for firefighters

#### **Personal protection equipment:**

Not determined or not applicable.

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 03.18.2022 Page 3 of 12

Nylon 11

#### **Special precautions:**

Not determined or not applicable.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Not determined or not applicable.

#### 6.2 Environmental precautions:

Not determined or not applicable.

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

Not determined or not applicable.

#### 6.4 Reference to other sections:

Not determined or not applicable.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling:

Not determined or not applicable.

#### 7.2 Conditions for safe storage, including any incompatibilities:

Not determined or not applicable.

## 7.3 Specific end use(s):

Not determined or not applicable.

# SECTION 8: Exposure controls/personal protection









#### 8.1 Control parameters

Only those substances with limit values have been included below.

#### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Croatia	Carbon Black	1333-86-4	8-Hour TWA: 3.5 mg/m³ (Dangerous Substances Exposure Limit Values in the Workplace)
	Carbon Black	1333-86-4	15-Minute STEL: 7 mg/m³ (Dangerous Substances Exposure Limit Values in the Workplace)
Cyprus	Carbon Black	1333-86-4	8-Hour TWA: 3.5 mg/m³ (Control of factory atmosphere and dangerous substances in factories regulation)
Czech Republic	Carbon Black	1333-86-4	8-Hour TWA: 2 mg/m³ (Government Decree 361/2007 Sb)
Poland	Carbon Black	1333-86-4	8-Hour TWA: 4 mg/m³ (inhalable fraction)

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 03.18.2022 Page 4 of 12

Nylon 11

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Slovakia	Carbon Black	1333-86-4	TWA: 2 mg/m³ ((Regulation No. 355.2006 concerning protection of workers exposed to chemical agents, Annex 1) (NPEL))
Belgium	Carbon Black	1333-86-4	8-Hour TWA: 3 mg/m <sup>3</sup>
Denmark	Carbon Black	1333-86-4	8-Hour TWA: 3.5 mg/m <sup>3</sup>
Definition	Carbon Black	1333-86-4	STEL: 7 mg/m <sup>3</sup>
Finland	Carbon Black	1333-86-4	8-Hour TWA: 3.5 mg/m <sup>3</sup>
	Carbon Black	1333-86-4	15-Minute STEL: 7 mg/m³
France	Carbon Black	1333-86-4	8-Hour TWA: 3.5 mg/m <sup>3</sup>
Greece	Carbon Black	1333-86-4	8-Hour TWA: 3.5 mg/m <sup>3</sup>
	Carbon Black	1333-86-4	15-Minute STEL: 7 mg/m <sup>3</sup>
Ireland	Carbon Black	1333-86-4	8-Hour TWA: 3 mg/m³ (inhalable fraction)
Italy	Carbon Black	1333-86-4	8-Hour TWA: 3 mg/m³ (Legislative Decree n.81)
Portugal	Carbon Black	1333-86-4	8-Hour TWA: 3.5 mg/m³ (VLE)
Spain	Carbon Black	1333-86-4	8-Hour TWA: 3.5 mg/m³ (VLA: VLA_ED)
United Kingdom	Carbon Black	1333-86-4	8-Hour TWA: 3.5 mg/m³ (WEL)
	Carbon Black	1333-86-4	STEL: 7 mg/m³ (WEL)
Sweden	Carbon Black	1333-86-4	8-Hour TWA: 3 mg/m <sup>3</sup>
Bulgaria	Carbon Black	1333-86-4	TWA: 8 mg/m³ (Cement dust, containing less than 2% free crystalline silicon dioxide, inhalable fraction)
	Carbon Black	1333-86-4	TWA: 3 mg/m³ (respirable fraction)
	Carbon Black	1333-86-4	TWA: 5 mg/m³ (Wool dust, wool textile dust and mixtures, containing synthetic fibers, dust from insects, down and feathers, inhalable fraction)
Hungary	Carbon Black	1333-86-4	8-Hour TWA: 3 mg/m³ (inhalable dust)
Latvia	Carbon Black	1333-86-4	8-Hour TWA: 5 mg/m³ (Fiberglass, with a polyester resin base)
	Carbon Black	1333-86-4	8-Hour TWA: 3 mg/m³ (Dusts, plant and animal origin: tea dust)
	Carbon Black	1333-86-4	8-Hour TWA: 4 mg/m³ (Carbon dust-coal, anthracite and other coal dust, oil, coke, hard coal, dark industrial soot)
Lithuania	Carbon Black	1333-86-4	8-Hour TWA: 10 mg/m³ (Dust, inhalable fraction)
	Carbon Black	1333-86-4	8-Hour TWA: 5 mg/m³ (Dust, respirable fraction)
Slovenia	Carbon Black	1333-86-4	8-Hour TWA: 10 mg/m³ (Dust, inhalable fraction)
	Carbon Black	1333-86-4	15-Minute STEL: 20 mg/m³ (Dust, inhalation fraction)
	Carbon Black	1333-86-4	8-Hour TWA: 1.25 mg/m³ (Dust, respirable fraction)

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 03.18.2022 Page 5 of 12

Nylon 11

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Carbon Black	1333-86-4	15-Minute STEL: 2.5 mg/m³ (Dust, respirable fraction)
Austria	Carbon Black	1333-86-4	8-Hour TWA: 5 mg/m³ (Respirable fraction)
	Carbon Black	1333-86-4	60-Minute STEL: 10 mg/m³ (Respirable fraction)
Germany (TRGS 900)	Carbon Black	1333-86-4	Limit Value: 1.25 mg/m³ (General dust limit value, alveolar fraction)
	Carbon Black	1333-86-4	15-Minute STEL: 10 mg/m³ (General dust limit, inhalable fraction)
Germany (MAK)	Carbon Black	1333-86-4	8-Hour TWA: 4 mg/m³ (Dust, general threshold limit value (inhalable fraction))

# **Biological limit values:**

No biological exposure limits noted for the ingredient(s).

Derived No Effect Level (DNEL): Ingredient Name: Carbon Black

**CAS #:** 1333-86-4

	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
Workers - Systemic	Acute - Dermal	No hazard identified
Effects	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified
	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
Workers - Local	Acute - Dermal	No hazard identified
Effects	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	0.5 mg/m <sup>3</sup>
	Chronic - Dermal	No hazard identified
	Acute - Oral	No hazard identified
	Acute - Inhalation	No hazard identified
General Population -	Acute - Dermal	No hazard identified
Systemic Effects	Chronic - Oral	No hazard identified
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified
	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
General Population -	Acute - Dermal	No hazard identified
Local Effect	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified

**Predicted No Effect Concentration (PNEC):** 

**Ingredient Name:** Carbon Black

CAS #: 1333-86-4

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 03.18.2022 Page 6 of 12

Nylon 11

<b>Environmental Protection Target</b>	PNEC
Fresh water	1 mg/L
Freshwater sediments	No hazard identified
Marine water	0.1 mg/L
Marine sediments	No hazard identified
Microorganisms in sewage treatment	Not determined or not available.
Soil (agricultural)	No hazard identified
Air	No hazard identified
Food chain	No exposure expected

# Information on monitoring procedures:

Not determined or not applicable.

### 8.2 Exposure controls

# **Appropriate engineering controls:**

Not determined or not applicable.

# **Personal protection equipment**

# Eye and face protection:

Not determined or not applicable.

#### Skin and body protection:

Not determined or not applicable.

## **Respiratory protection:**

Not determined or not applicable.

## **General hygienic measures:**

Not determined or not applicable.

#### **Environmental exposure controls:**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Product (substance / mixture) related measures to prevent exposure:	Not determined or not applicable.
Instruction measures to prevent exposure:	Not determined or not applicable.
Organisational measures to prevent exposure:	Not determined or not applicable.
Technical measures to prevent exposure:	Not determined or not applicable.

#### Risk management measures to control exposure:

Not determined or not applicable.

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

Appearance	Black Powder
Odor	Odorless
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 03.18.2022 Page 7 of 12

Nylon 11

Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	> 842 °F (> 450 °C)
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

#### 9.2 Other information

None.

# SECTION 10: Stability and reactivity

#### 10.1 Reactivity:

Does not react under normal conditions of use and storage.

# 10.2 Chemical stability:

Stable under normal conditions of use and storage.

# 10.3 Possibility of hazardous reactions:

None under normal conditions of use and storage.

#### 10.4 Conditions to avoid:

Store protected from moisture and heat

#### 10.5 Incompatible materials:

None known.

#### 10.6 Hazardous decomposition products:

None known.

# SECTION 11: Toxicological information

# 11.1 Information on toxicological effects

**Acute toxicity** 

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

**Product data:** No data available.

**Substance data:** 

Name	Route	Result
Carbon Black	oral	LD50 Rat: >2000 mg/kg
	dermal	LD50 Rabbit: >3000 mg/kg

# Skin corrosion/irritation

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

**Product data:**No data available.

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Initial preparation date: 03.18.2022 Page 8 of 12

Nylon 11

Substance data: No data available.
Serious eye damage/irritation

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

**Product data:**No data available.

**Substance data:** No data available. **Respiratory or skin sensitization** 

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

**Product data:**No data available.

Substance data: No data available.

Carcinogenicity

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

Product data: No data available.

Substance data:

Name	Species	Result
Carbon Black	Not applicable	Suspected of causing cancer by inhalation exposure
		route.

#### International Agency for Research on Cancer (IARC):

Name	Classification
Carbon Black	Group 2B
Polyundecanamide	Not Applicable

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

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

**Product data:** No data available. **Substance data:** No data available.

**Reproductive Toxicity** 

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

**Product data:**No data available.

Substance data: No data available.

**Specific target organ toxicity (single exposure)** 

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

**Product data:**No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

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

**Product data:**No data available.

Substance data: No data available.

**Aspiration toxicity** 

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

**Product data:**No data available.

Substance data: No data available.

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Initial preparation date: 03.18.2022 Page 9 of 12

Nylon 11

#### Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available. **Other information:** 

No data available.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

# Acute (short-term) toxicity

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

Product data: No data available.

Substance data:

Name	Result
Carbon Black	Fish LC50 Danio reruo: >1000 mg/L (96 h)
	Aquatic Plants EC50 Desmodesmus subspicatus: >10000 mg/L (48 h)

#### Chronic (long-term) toxicity

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

**Product data:** No data available. **Substance data:** No data available.

#### 12.2 Persistence and degradability

Product data: No data available.

**Substance data:** 

Name	Result	
Carbon Black	Carbon black is an inorganic substance and will not be biodegraded by	
	microorganisms.	

## 12.3 Bioaccumulative potential

Product data: No data available.

**Substance data:** 

Name	Result
Carbon Black	Bioaccumulation is not expected to occur.

#### 12.4 Mobility in soil

Product data: No data available.

Substance data: No data available.

#### 12.5 Results of PBT and vPvB assessment

#### **Product data:**

**PBT assessment:** This product does not contain any substances that are assessed to be a PBT. **vPvB assessment:** This product does not contain any substances that are assessed to be a vPvB.

# Substance data:

#### **PBT** assessment:

Carbon Black This substance is not PBT.	
vPvB assessment:	
Carbon Black	This substance is not vPvB.

#### **12.6** Other adverse effects: No data available.

#### 12.7 Hazard to the ozone layer

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

Product data: No data available.

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Initial preparation date: 03.18.2022 Page 10 of 12

Nylon 11

Substance data: No data available.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### 13.1.1 Product / Packaging disposal:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities.

Waste codes / waste designations according to LoW: Not determined or not available.

- 13.1.2 Waste treatment-relevant information: Not determined or not available.
- **13.1.3 Sewage disposal-relevant information:** Not determined or not available.

#### 13.1.4 Other disposal recommendations:

Packaging material should be recycled or disposed of in accordance with federal, state, and local regulations.

# **SECTION 14: Transport information**

#### International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

#### International Carriage of Dangerous Goods by Inland Waterways (ADN)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

#### **International Maritime Dangerous Goods (IMDG)**

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

#### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None

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Initial preparation date: 03.18.2022 Page 11 of 12

#### Nylon 11

Environmental hazards	None
Special precautions for user	None

Transport in bulk according to Annex II of MARPOL and the IBC Code	
Bulk Name	None
Ship type	None
Pollution category	None

#### **SECTION 15: Regulatory information**

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

# Inventory listing (EINECS):

1333-86-4	Carbon Black	Listed
25587-80-8	,	Not Listed

**REACH SVHC candidate list:** None of the ingredients are listed. **REACH SVHC Authorizations:** None of the ingredients are listed.

**REACH Restriction:** None of the ingredients are listed. **Water hazard class (WGK) (Product):** Not determined.

# Water hazard class (WGK) (Substance):

Ingredient Name	CAS	Class	
Carbon Black	1333-86-4	Non-hazardous to water	

#### Other regulations

# **Germany TA Luft:**

Ingredient Name	CAS	Class	Base Emission Rate	Max Concentration
Carbon Black	1333-86-4			

Additional information: Not determined.

#### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

# **SECTION 16: Other information**

# **Abbreviations and Acronyms: None**

# Summary of classification(s) in section 3:

Carc. 2	Carcinogenicity, category 2
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# **Summary of hazard statements in section 3:**

H351	Suspected of causing cancer (state route of exposure if it is conclusively
	proven that no other routes of exposure cause the hazard)

#### Disclaimer:

This product has been classified in accordance with EC No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and EC No. 1907/2006 (REACH). The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation, and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH)

Initial preparation date: 03.18.2022 Page 12 of 12

Nylon 11

workplace remains with the user.

Initial preparation date: 03.18.2022

**End of Safety Data Sheet**