

# SAFETY DATA SHEET

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

### 1.1. Product identifier

Trade name or designation of the mixture PC  
Registration number -  
Synonyms POLYCARBONATE  
Issue date 21-August-2019  
Version number 01

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

Identified uses 3D printer filament  
Uses advised against None known.

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

#### Supplier

Company name eMotion Tech  
Adresse 185 avenue des États-Unis, 31200 Toulouse, France  
Telephone +33 (0)5 82 95 26 62 (Office hours Mo. - Fr. 9:00 - 12:00, 14:00 - 17:30)  
Contact person Product Compliance  
e-mail contact@emotion-tech.com

1.4. Emergency telephone number +33 (0)1 40 05 48 48

National Poison Information Center Paris, France

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary Not available.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms None.  
Signal word None.  
Hazard statements The mixture does not meet the criteria for classification.

#### Precautionary statements

Prevention Not available.  
Response Not available.  
Storage Not available.  
Disposal Not available.

Supplemental label information None.

2.3. Other hazards Not a PBT or vPvB substance or mixture.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
polycarbonate	90 - 100	24936-68-3	-	-	

Classification: -

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Bisphenol-A	< 0,1	80-05-7 201-245-8	-	604-030-00-0	#
<b>Classification:</b>	Skin Sens. 1;H317, Eye Dam. 1;H318, STOT SE 3;H335, Repr. 1B;H360F, Aquatic Chronic 2;H411				
Other components below reportable levels	< 1				

#### List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

**Composition comments** The full text for all H-statements is displayed in section 16.

### SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 4.1. Description of first aid measures

**Inhalation** Not likely, due to the form of the product. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

**Skin contact** If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn. Do not peel polymer from the skin.

**Eye contact** Not likely, due to the form of the product. If hot product contacts eye, flush with water for at least 15 minutes and seek medical attention immediately.

**Ingestion** Not likely, due to the form of the product.

**4.2. Most important symptoms and effects, both acute and delayed** Exposure may cause temporary irritation, redness, or discomfort.

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

### SECTION 5: Firefighting measures

**General fire hazards** No unusual fire or explosion hazards noted.

#### 5.1. Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may be formed.

#### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special fire fighting procedures** Move containers from fire area if you can do so without risk.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

### SECTION 6: Accidental release measures

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

**For non-emergency personnel** Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

**For emergency responders** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

**6.2. Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up** Sweep up or vacuum up spillage and collect in suitable container for disposal. For waste disposal, see section 13 of the SDS.

**6.4. Reference to other sections** For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

### SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Observe good industrial hygiene practices.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

**7.3. Specific end use(s)**

Not available.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits****Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	Ceiling	5 mg/m <sup>3</sup>	Inhalable fraction.
	MAK	2 mg/m <sup>3</sup>	Inhalable fraction.

**Belgium. Exposure Limit Values.**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m <sup>3</sup>	

**Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m <sup>3</sup>	Inhalable fraction.

**Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	MAC	2 mg/m <sup>3</sup>	Total dust.

**Czech Republic. OELs. Government Decree 361**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	Ceiling	5 mg/m <sup>3</sup>	Dust/aerosol, inhalable.
	TWA	2 mg/m <sup>3</sup>	Dust/aerosol, inhalable.

**Denmark. Exposure Limit Values**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	TLV	2 mg/m <sup>3</sup>	Particulate.

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.

**Finland. Workplace Exposure Limits**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m <sup>3</sup>	

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	VME	10 mg/m <sup>3</sup>	Inhalable dust.

**Regulatory status:** Regulatory binding (VRC)**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	AGW	5 mg/m <sup>3</sup>	Inhalable fraction.

**Greece. OELs (Decree No. 90/1999, as amended)**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m <sup>3</sup>	Inhalable fraction.

<b>Hungary. OELs. Joint Decree on Chemical Safety of Workplaces</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.
<b>Iceland. OELs. Regulation 154/1999 on occupational exposure limits</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.
<b>Ireland. Occupational Exposure Limits</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable dust.
<b>Italy. Occupational Exposure Limits</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	10 mg/m3	Inhalable dust.
<b>Latvia. OELs. Occupational exposure limit values of chemical substances in work environment</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.
<b>Lithuania. OELs. Limit Values for Chemical Substances, General Requirements</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Respirable dust.
<b>Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.
<b>Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.
<b>Netherlands. OELs (binding)</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.
<b>Norway. Administrative Norms for Contaminants in the Workplace</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TLV	2 mg/m3	Inhalable fraction.
<b>Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.
<b>Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.
<b>Romania. OELs. Protection of workers from exposure to chemical agents at the workplace</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.
<b>Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.
<b>Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)</b>			
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m3	Inhalable fraction.

**Spain. Occupational Exposure Limits**

Components	Type	Value
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m <sup>3</sup>

**Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m <sup>3</sup>	Inhalable dust.

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	STEL	5 mg/m <sup>3</sup>	Inhalable fraction.
	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.

**UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m <sup>3</sup>

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU**

Components	Type	Value	Form
Bisphenol-A (CAS 80-05-7)	TWA	2 mg/m <sup>3</sup>	Inhalable fraction.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

**8.2. Exposure controls**

**Appropriate engineering controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**General information** Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**- Hand protection** Wear appropriate chemical resistant gloves.

**- Other** Wear suitable protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

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

**Physical state** Solid.

**Form** filament

**Colour** Color depends on product specification

**Odour** Slight.

**Odour threshold** Not available.

**pH** Not available.

**Melting point/freezing point** > 135 °C (> 275 °F)

<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	> 550 °C (> 1022 °F)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.
<b>9.2. Other information</b>	
<b>Density</b>	1,10 - 1,30 g/cm <sup>3</sup>

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong oxidising agents.
<b>10.6. Hazardous decomposition products</b>	Irritating and/or toxic fumes and gases may be emitted upon the products decomposition.

## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	Based on available data, the classification criteria are not met.
<b>Skin contact</b>	Based on available data, the classification criteria are not met.
<b>Eye contact</b>	Based on available data, the classification criteria are not met.
<b>Ingestion</b>	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
<b>Symptoms</b>	Exposure may cause temporary irritation, redness, or discomfort.
<b>11.1. Information on toxicological effects</b>	
<b>Acute toxicity</b>	Not known.
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory sensitisation</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitisation</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)</b>	
Not listed.	

<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Mixture versus substance information</b>	No information available.
<b>Other information</b>	This product has no known adverse effect on human health.

## SECTION 12: Ecological information

<b>12.1. Toxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.
<b>12.3. Bioaccumulative potential</b>	
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	No data available.
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.
<b>12.6. Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

14.1. - 14.6.: Not regulated as dangerous goods.

### RID

14.1. - 14.6.: Not regulated as dangerous goods.

### ADN

14.1. - 14.6.: Not regulated as dangerous goods.

### IATA

14.1. - 14.6.: Not regulated as dangerous goods.

### IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## SECTION 15: Regulatory information

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

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### **Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### **Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

#### **Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

#### **Other regulations**

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

#### **National regulations**

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

#### **15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

### **SECTION 16: Other information**

#### **List of abbreviations**

Not available.

#### **References**

Not available.

#### **Information on evaluation method leading to the classification of mixture**

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

#### **Full text of any H-statements not written out in full under Sections 2 to 15**

H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.  
H360F May damage fertility.  
H411 Toxic to aquatic life with long lasting effects.

#### **Revision information**

None.

#### **Training information**

Follow training instructions when handling this material.

#### **Disclaimer**

This safety data sheet (SDS) is issued based on the latest reference, data etc currently available. The information in this SDS has been carefully assessed, but no guarantee is given for its accuracy. We cannot anticipate all conditions under which this product may be used. It is the user's responsibility to take appropriate safety measures for handling.