Material Safety Data Sheet
Polymaker PC-Plus

SECTION 1: Hazards identification

Classification of the substance or mixture

GHS Classification:
Not a dangerous substance according to GHS.

GHS-Labelling:
Not a dangerous substance according to GHS.

SECTION 2: Composition / information on ingredients

Type of product:
Mixture
Polycarbonate based on bisphenol a flame-retarded

SECTION 3: First aid measures

Description of first aid measures

In case of skin contact:
CONTACT WITH THE HOT MELT: Cool immediately with plenty of water. Do not remove product crusts which may have formed neither forcibly nor by applying any solvents to the skin involved. To obtain treatment for possible burns, and appropriate skin care, seek medical advice immediately.

The following information refers to the handling of the product at room temperature. In case of skin contact wash affected areas thoroughly with soap and plenty of water.

SECTION 4: Firefighting measures

Suitable extinguishing media:
sprayed water jet, extinguishing powder, Carbon dioxide (CO2), Foam, Dry chemical

Special hazards arising from the substance or mixture:
Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes.

Advice for fire-fighters:
Firemen must wear self-contained breathing apparatus.
Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

SECTION 5: Accidental release measures

Personal precautions, protective equipment and emergency procedures:
slip hazard!

Methods and meterial for containment and cleaning up:
Use mechanical handling equipment. Avoid dust formation.

Reference to other sections:
For further disposal measures see section 13.

SECTION 6: Handling and storage

Precautions for safe handling:
Under recommended processing conditions small amounts of residues of monomers and residual solvent may be emitted. Provided good ventilation and/or local exhaust systems are used, the Workplace Exposure Limit(s) stated in section 8 should not be exceeded.
Dust must be removed by effective exhaust ventilation.

Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at end of work and use skin-protecting ointment. Change contaminated clothing

Conditions for safe storage, including any incompatibilities:
No special storage conditions required.

SECTION 7: Exposure controls/personal protection

The regulations for the substances listed below must be observed when processing this product, particularly if processing takes place at elevated temperatures. In our experience the provision of effective fresh-air and exhaust ventilation equipment at the points where vapors may be generated will ensure compliance with the tolerance limits quoted below.

Substance	CAS-No.	Basis	Type	Value	Ceiling Limit Value	Remarks
phenol		CN OEL	TWA	10 mg/m3		
phenol		CN OEL				Demal absorption possible
Chlorobenzene		CN OEL	TWA	50 mg/m3		
General limiting value of dust		CN OEL	TWA	8 mg/m3		Total dust
General limiting value of dust		CN OEL	STEL	10 mg/m3		Total dust

Exposure controls

Respiratory protection:
In case of dust formation use respiratory equipment with filter type particle filter P1 according to EN 143.

Hand protection:
Suitable materials for safety gloves; EN 374: Polyvinyl chloride - PVC (>= 0.5 mm) Contaminated and/or damaged gloves must be changed.

Eye protection:
Wear eye/face protection.

Skin and body protection:
Wear suitable protective clothing.

SECTION 8: Physical and chemical properties

Appearance:	
Description:	granular
Color:	different according to colouration
Odor:	odourless
pH:	Not applicable
Softening point:	> 130 - 160 °C
Upper/lower flammability or explosive limits:	Not applicable
Vapour pressure:	Not applicable
Density:	ca 1,2 - 1,4 g/cm3
Bulk density:	600 - 700 kg/m3
Water solubility:	practically insoluble
Autoignition temperature:	Not applicable
Ignition temperature:	>450 °C
Decomposition temperature:	>= 380 °C
Viscosity, dynamic:	not applicable

SECTION 9: Stability and reactivity

Chemical stability :
Fumes evolved by overheating during improperly processing or by burning may be injurious to health.

Possibility of hazardous reactions:
No hazardous reactions observed.

Hazardous decomposition products:
Caused by smouldering and incomplete combustion toxic fumes mainly consisting of CO and CO2 may be developed.

SECTION 10: Toxicological information

According to our experience and information the product has no harmful effects on health if properly handled.

SECTION 11: Ecological information

Do not allow to escape into waterways, wastewater or soil.

Additional information on ecotoxicology:
The product is practically insoluble in water. In view of its consistency and insolubility in water, no ecological problems are to be expected if the product is properly handled. The product is not readily biodegradable.

SECTION 12: Disposal considerations

Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

Waste treatment methods

After containers have been emptied as thoroughly as possible (e.g. by pouring, scraping or draining until „drip-dry"), they can be sent to an appropriate collection point set up within the framework of the existing take-back scheme of the chemical industry. Containers must be recycled in compliance with national legislation and environmental regulations.

The product is suitable for mechanical recycling. After appropriate treatment it can be remelted and reprocessed into new moulded articles. Mechanical recycling is only possible if the material has been selectively retrieved and carefully segregated according to type.

SECTION 13: Transport information

ADR/RID	**Not dangerous goods**
ADN	**Not dangerous goods**

This classification data does not apply to transportation by tanker. If required, additional information can be requested from the manufacturer.

IATA	**Not dangerous goods**
IMDG	**Not dangerous goods**

Special precautions for user: Not dangerous cargo. Keep dry

SECTION 14: Regulatory information

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

Other regulations:

Only China:	Compliant with the following local regulations
Only China:	Regulations on the control over safety of hazardous chemicals, Decree No.344
Only China:	GB/T 16483-2008 Safety data sheet for Chemical products-Content and order of section
Only China:	GB 13690-2009 General rule for classification and hazard communication of chemicals
Only China:	GB 20576- GB 20598, Safety rules for classification, precautionary labelling and precautionary statements of chemicals

SECTION 15: Other information

The safety data sheet is also valid for corresponding MAS... types.

Further information

The information provided in this Safety Data Sheet 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 relates only 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.

SECTION 16: Emergency contact

Contact:

Contact person: Michael Elstner

Phone: +49 89 2488986 – 0

Mail: emergency@germanreprap.com