

PC

Section 1 .Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

PC

1.2 Company Identification

Orbi-Tech GmbH, Moltkestrasse 25, 42799 Leichlingen, Germany

Section 2. Hazards Identification

Not a product dangerous for health or the environment according to the definition of EC Directives 2006/121/EC or 1999/45/EC and their valid adaptations and derived national regulations.

Section 3. Composition / information on ingredients

Polycarbonate based on bisphenol A

Section 4. 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 5. Firefighting measures

5.1 Extinguishing media

Sprayed water jet, extinguishing powder, Carbon dioxide (CO₂), Foam, Dry chemical

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.

Firemen must wear self-contained breathing apparatus.

Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

Section 6. Accidental release measures

6.1 Personal precautions

Slip hazard!

6.2 Methods for cleaning up

Use mechanical handling equipment

Handling and storage

7.1 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 Chapter 8 should not be exceeded.

Dust must be removed by effective exhaust ventilation.

7.2 Storage

No special storage conditions required.

VCI storage class (VCI = German Association of the Chemical Industry): 11

Section 8 Exposure controls/personal protection

8.1 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

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.

UK Workplace Exposure Limits (WEL), per EH40 document (Health & Safety Executive). If no UK value exists, EU exposure limits given where available.

Substance	CAS-No.	Basis	Type	Value	Ceiling Limit Value	Remarks
phenol	108-95-2	EH40 WEL	TWA	2 ppm		Dermal absorption possible
phenol	108-95-2	EU ELV	TWA	2 ppm 7.8 mg/m ³		Dermal absorption possible
chlorobenzene	108-90-7	EH40 WEL	TWA	1 ppm		Dermal absorption possible
chlorobenzene	108-90-7	EH40 WEL	STEL	3 ppm		
chlorobenzene	108-90-7	EU ELV	TWA	5 ppm 23 g/m ³		
chlorobenzene	108-90-7	EU ELV	STEL	15 ppm 70 mg/m ³		
General limiting value of dust		EH40 WEL	TWA	10 mg/m ³		inhalable fraction
General limiting value of dust		EH40 WEL	TWA	4 mg/m ³		alveolar fraction

8.2 Personal protection

8.2.1 Respiratory protection

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

8.2.2 Hand protection

Suitable materials for safety gloves; EN 374-3:

Polyvinyl chloride - PVC (≥ 0.5 mm)

Contaminated and/or damaged gloves must be changed.

8.2.3 Eye protection

Wear eye/face protection.

Skin and body protection:

Wear suitable protective clothing.

8.2.4 Hygiene measures

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

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Colour: different according to colouration
Form: granular
Odour: odourless
Softening point: $> 128 - 158$ °C
Decomposition temperature: ≥ 375 °C
Density: ca. 1.2 - 1.4 g/cm³

Bulk density: 590 - 710 kg/m³
Vapour pressure: not applicable
Viscosity, dynamic: not applicable
Water solubility: practically insoluble
pH: not applicable
Ignition temperature: > 445 °C

Section 10. Stability and reactivity

10.1 Hazardous reactions

No hazardous reactions observed.

10.2 Hazardous decomposition products

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

10.3 Thermal decomposition

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

Section 11. Information on toxicological effects

Under recommended processing conditions small amounts of emissions may occur.

The regulations for the substances listed below must be observed when processing this product, particularly if processing takes place at elevated temperatures.

Substance CAS-No. R-phrases(s)

phenol 108-95-2 R68 Possible risk of irreversible effects.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

R34 Causes burns.

chlorobenzene 108-90-7 R20 Harmful by inhalation.

4-tert-butylphenol 98-54-4 R36/37/38 Irritating to eyes, respiratory system and skin.

bisphenol A; 4,4'-isopropylidenediphenol
80-05-7 R62 Possible risk of impaired fertility.

R37 Irritating to respiratory system.

R41 Risk of serious damage to eyes.

R43 May cause sensitization by skin contact.

Additional information:

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

Section 12. 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 13. Disposal consideration

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.

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 14, Transport information

ADR/RID Not dangerous goods

ADNR Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

Other information : Not dangerous cargo.

Keep dry.

Section 15. Regulatory information

No labelling is required for this material by the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP3), in accordance with EC Directives.

National legislation

Water contaminating class (Germany): nw not water endangering

(in accordance with Annex 1 to the Directive on Water-Hazardous Substances)

Section 16. Other Information

Orbi-Tech GmbH urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.