

Safety Data Sheet

890697/01

Date of issue: March 25, 2004

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Revised: March 22, 2004

*1. Identification of the substance/preparation and the company

Makrolon / RPC / Bayloy 10 series - Sheets

Manufacturer: Bayer Sheet Europe GmbH / NV / SpA

Application:

Architectural glazing and industrial applications, Semi-finished products for the production of plastic articles

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2. Composition/information on ingredients

polycarbonate based on bisphenol A

3. Hazards identification

The product is not hazardous to health or the environment according to EU criteria.

4. First-aid measures

After eye contact with product dust (generated during machining operations):

Contamination of the eyes must be treated by thorough irrigation with water, with the eyelids held open.

5. Fire-fighting measures

Extinguishing media: Water spray, extinguishing powder, CO₂, foam, dry powder.

Firemen have to wear self-contained breathing apparatus.

6. Accidental release measures

Take up mechanically.

7. Handling and storage

Dust must be removed by effective exhaust ventilation.

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

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*8. Exposure controls/Personal protection

The regulations for the substances listed below must be observed when processing this product.

Occupational Exposure Limits (mg/m³), Time Weighted Average:

	EU	U. Kingdom	R. of Ireland	ACGIH
fine dust 1)				
respirable	-	5	4	3
inhalable	-	10	10	10

1) in consequence with mechanical treatment, e.g. grinding, occurring.

generated during machining operations

EU: Commission Directive 91/322/EEC and amendment 2000/39/EC

Respiratory protection:

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

Hand protection:

Protective gloves of leather, contaminated or damaged gloves should be replaced.

Eye protection:

Protective goggles with side shield or tightly fitting protective goggles

Body protection:

Close fitting occupational clothing is recommended.

Grease skin. At the end of work, wash hands and face.

9. Physical and chemical properties

tested in accordance with

Form:	Sheets	
Colour:	colourless or according to pigmentation	
Odour:	odourless	
Melting range:	220-230 °C	
Softening point:	150-160 °C	
Density:	approx. 1,2 g/cm ³ at 20 °C	DIN 53479
Vapour pressure:	not applicable	
Viscosity:	not applicable	
Solubility in water:	insoluble	
pH value:	not applicable	
Flash-ignition temperature:	> 400 °C	
Self-ignition temperature:	> 400 °C	
Explosive limits:	not applicable	

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*10. Stability and reactivity

Thermal decomposition:

Decomposition begins at 380 °C. Fumes evolved by overheating during improperly processing or by burning may be injurious to health.

Hazardous decomposition products:

Caused by smouldering and incomplete combustion toxic fumes mainly consisting of CO and CO₂ may be developed. Formation of traces of aliphatic and aromatic hydrocarbons, aldehydes, acids, phenol and phenol-derivatives may occur.

Hazardous reactions:

No hazardous reactions observed.

11. Toxicological information

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

12. Ecological information

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. This product is not readily biodegradable.

13. Disposal considerations

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.

May only be transported to suitable incinerator with reduced non-air emissions observing local official regulations.

May be disposed of together with household refuse if local official regulations are observed.

European Waste Catalogue (EWC) code: 070213

14. Transport information

GGVSE: -- UN: NODG PG: --

RID/ADR: -- UN: NODG PG: --

ADNR: -- UN: NODG PG: --

GGVSee/IMDG Code: -- UN: NODG PG: -- MPO: NO

ICAO-TI/IATA-DGR: -- UN: NRES PG: --

Declaration for land shipment: --

Declaration for sea shipment: --

Declaration for shipment by air: --

Other information:

Not dangerous cargo. Keep dry.

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15. Regulatory information

No labelling is required in accordance with the EEC directives.

Water pollution class (WGK: Not hazardous to water (VwVwS appendix 1)
(VwVwS = German Regulation on Substances Hazardous to Water)

*16. Other information

The safety data sheet is valid for:

- Makrolon multi UV
- Makrolon onda multi UV
- Makrolon FG
- Makrolon GP
- Makrolon UV
- Makrolon CS UV
- Makrolon NR
- Makrolon FR
- Makrolon AR
- Bayloy 10 series
- Chairmat
- RPC black

Makrolon FG sheets may be used for production of articles determined for food contact.

With respect to its monomer and/or additive constituents the Makrolon FG sheets comply with:

EU

Commission Directives 2002/72/EC of August 6, 2002: Plastics materials and articles intended to come into contact with foodstuffs for food contact applications at room temperature or for short periods at temperatures up to 100°C. The Directive 2002/72/EC consolidates and summarizes all earlier amendmends to Directive 90/128/EEC, being 92/39, 93/9, 95/3, 96/11, 1999/91, 2001/62 and 2002/17.

Recommendation XI: "Polycarbonates and mixtures of polycarbonates with other polymers or Copolymers" (as of 01/03/2001) of the Bundesinstitut für Risikobewertung (BfR, former BgVV resp. BGA).

USA

- FDA-Regulation Title 21 Code of Federal Regulations Sec.177.1580
"Polycarbonate resins" for food contact applications up to 100°C.

All chapters in the SDS which have been changed since last edition are marked with an asterisk in front of the Chapter number.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance.