

MATERIAL SAFETY DATA SHEET



Bayer MaterialScience

Bayer MaterialScience LLC
Product Safety & Regulatory Affairs
100 Bayer Road
Pittsburgh, PA 15205-9741
USA

TRANSPORTATION EMERGENCY

CALL CHEMTREC: (800) 424-9300
INTERNATIONAL: (703) 527-3887

NON-TRANSPORTATION

Bayer Emergency Phone: (412) 923-1800
Bayer Information Phone: (800) 662-2927

1. Product and Company Identification

Product Name: MAKROLON 2205 000000
Material Number: 519275
Chemical Family: Thermoplastic Polymer
Chemical Name: Bisphenol A Polycarbonate
Formula: Not applicable - polymeric material

2. Hazards Identification

Emergency Overview

CAUTION! Color: Natural **Form:** solid Pellets **Odor:** Slight.
Melted product is flammable and produces intense heat and dense smoke during burning. Irritating gases/fumes may be given off during burning or thermal decomposition. May cause mechanical irritation (abrasion). Causes a slipping hazard if spilled. Contact with hot material will cause thermal burns.

Potential Health Effects

Primary Routes of Entry: Inhalation, Skin Contact, Eye Contact

Medical Conditions Aggravated by Exposure: Respiratory disorders

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Skin

Acute Skin

For Product: MAKROLON 2205 000000

Contact with heated material can cause thermal burns.

Eye

Acute Eye

For Product: MAKROLON 2205 000000

May cause mechanical irritation.

Material Name: MAKROLON 2205 000000 Article Number: 519275

General Effects of Exposure

Acute Effects of Exposure

For Product: MAKROLON 2205 000000

Gases and fumes evolved during the thermal processing or decomposition of this material may irritate the eyes, skin or respiratory tract.

Chronic Effects of Exposure

For Product: MAKROLON 2205 000000

Not expected to cause any adverse chronic health effects.

Carcinogenicity:

No Carcinogenic substances as defined by IARC, NTP and/or OSHA

3. Composition/Information on Ingredients

Hazardous Components

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

OTHER INGREDIENTS

Additional types of polycarbonate may be used as necessary to adjust the melt flow rate.

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
>=1%	Bisphenol A Polycarbonate	CAS# is a trade secret

4. First Aid Measures

Eye Contact

In case of contact, flush eyes with plenty of lukewarm water.

Skin Contact

In case of skin contact, wash affected areas with soap and water. Get medical attention if thermal burn occurs.

Inhalation

If inhaled, remove to fresh air.

Ingestion

Get medical attention.

5. Fire-Fighting Measures

Suitable Extinguishing Media: water, foam, dry chemical, carbon dioxide (CO₂)

Special Fire Fighting Procedures

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

Unusual Fire/Explosion Hazards

Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Dust may form explosive mixtures with air.

6. Accidental release measures

Spill and Leak Procedures

If molten, allow material to cool and place into an appropriate marked container for disposal.

7. Handling and Storage

Storage Temperature:

maximum: 93 °C (199.4 °F)

Storage Period

Not Established

Handling/Storage Precautions

Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Avoid breathing dust.

Further Info on Storage Conditions

Protect equipment (e.g. storage bins, conveyors, dust collectors) with explosion vents.

8. Exposure Controls / Personal Protection

Country specific exposure limits have not been established or are not applicable

Industrial Hygiene/Ventilation Measures

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines.

Hand Protection

Wear heat resistant gloves when handling molten material.

Eye Protection

safety glasses with side-shields.

Skin and body protection

No special skin protection requirements during normal handling and use.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Purgings should be collected as small flat thin shapes or thin strands to allow for rapid cooling.

9. Physical and chemical properties

Form: solid

Appearance: Pellets

Material Name: MAKROLON 2205 000000 Article Number: 519275

Color:	Natural
Odor:	Slight
pH:	Not Applicable
Melting Point:	220 °C (428 °F)
Boiling Point/Range:	Not Applicable
Flash Point:	320 °C (608 °F)
Lower Explosion Limit:	Not Established
Upper Explosion Limit:	Not Established
Vapor Pressure:	Not Applicable
Density:	not applicable
Specific Gravity:	Approximately 1.11
Solubility in Water:	Insoluble
Autoignition Temperature:	450 °C (842 °F)
Decomposition Temperature:	380 °C (716 °F)
Softening Point:	150 °C (302 °F)
Bulk Density:	38 - 42 lb/ft3

10. Stability and Reactivity

Hazardous Reactions

Hazardous polymerization does not occur.

Stability

Stable

Materials to avoid

None known.

Conditions to avoid

None known.

Hazardous decomposition products

By Fire and Thermal Decomposition: Phenol; Bisphenol A; Carbon Dioxide; aldehydes, Carbon monoxide

11. Toxicological Information

No information available.

12. Ecological Information

No information available.

13. Disposal considerations

Waste Disposal Method

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

14. Transportation information

Land transport (DOT)
Non-Regulated

Sea transport (IMDG)
Non-Regulated

Air transport (ICAO/IATA)
Non-Regulated

15. Regulatory Information

United States Federal Regulations

OSHA Hazcom Standard Rating: Non-Hazardous

US. Toxic Substances Control Act: Listed on the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302):

Components

None

SARA Section 311/312 Hazard Categories:

Non-hazardous under Section 311/312

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Components

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

Components

None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

The concentrations reported below in units of parts per million (ppm) or parts per billion (ppb) are maximum values.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

Weight %

Components

CAS-No.

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>=1%

Bisphenol A Polycarbonate

CAS# is a trade secret

California Prop. 65:

Warning! This product contains chemical(s) known to the State of California to be Carcinogenic.

Weight %

Components

CAS-No.

0.0003%

Methylene Chloride

75-09-2

16. Other Information

HMIS Rating

Health	0
Flammability	1
Physical Hazard	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

* = Chronic Health Hazard

Bayer MaterialScience LLC's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by Bayer MaterialScience LLC as a customer service.

Contact Person: Product Safety Department
Telephone: (412) 777-2835
MSDS Number: R301057
Version Date: 08/25/2005
Report Version: 1.5

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