

MATERIAL SAFETY DATA SHEET



Bayer MaterialScience

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Product Safety & Regulatory Affairs
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USA

1. Product and Company Identification

Product Name: BAYBLEND MTR-MASS TRANSPORTATION RAIL CLEARE A00, SMOOTH / SMOOTH
Material Number: 58493493
Chemical Family: Thermoplastic Polymer Sheet

2. Hazards Identification

Emergency Overview

Caution: **Color:** tint **Form:** solid sheets **Odor:** odourless.
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. 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: BAYBLEND MTR-MASS TRANSPORTATION RAIL CLEARE A00, SMOOTH / SMOOTH

Contact with heated material can cause thermal burns.

Ingestion

Acute Ingestion

For Product: BAYBLEND MTR-MASS TRANSPORTATION RAIL CLEARE A00, SMOOTH / SMOOTH

Ingestion is not a typical route of industrial exposure.

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General Effects of Exposure

Acute Effects of Exposure

For Product: BAYBLEND MTR-MASS TRANSPORTATION RAIL CLEARE A00, SMOOTH / SMOOTH

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: BAYBLEND MTR-MASS TRANSPORTATION RAIL CLEARE A00, SMOOTH / SMOOTH

Not expected to cause any adverse chronic health effects.

Carcinogenicity:

Talc (non-asbestos form)

IARC - Overall evaluation: 3 Not classifiable as to carcinogenicity to humans.

3. Composition/Information on Ingredients

Hazardous components

The following potentially hazardous ingredient(s) are used to formulate this product. As supplied, the ingredient(s) are bound in the polymer matrix. Because they are bound in the matrix, they are not expected to create any unusual hazards when handled and processed according to good manufacturing and industrial hygiene practices and the guidelines provided in this MSDS.

Weight percent

<=13%

<=5%

Components

Talc (non-asbestos form)

Zinc borate hydrate

CAS-No.

14807-96-6

138265-88-0

4. First aid measures

Eye contact

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

Skin contact

Cool melted product on skin with plenty of water. Do not remove solidified product. Get medical attention if thermal burn occurs.

Inhalation

Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.

Ingestion

Get medical attention.

5. Fire-fighting measures

Suitable extinguishing media:

Water fog, Dry chemical, Carbon dioxide (CO2)

Special Fire Fighting Procedures

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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.

6. Accidental release measures

Spill and Leak Procedures

If molten, allow material to cool and place into an appropriate marked container for disposal. Sweep up and shovel into suitable containers for disposal.

7. Handling and storage

Storage temperature:

maximum: 49 °C (120.2 °F)

Storage period

Containers should be tightly closed to prevent contamination with foreign materials and moisture.

Handling/Storage Precautions

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

Further Info on Storage Conditions

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

8. Exposure controls/personal protection

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, especially during cutting, grinding and high heat operations.

Respiratory protection

In the case of dust or aerosol formation use respirator with an approved filter.

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

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thin shapes or thin strands to allow for rapid cooling.

9. Physical and chemical properties

Form:	solid
Appearance:	sheets
Color:	tint
Odor:	odourless
pH:	not applicable
Flash point:	> 450 °C (> 842 °F)
Lower explosion limit:	Not Established
Upper explosion limit:	Not Established
Vapour pressure:	not applicable
Solubility in Water:	Insoluble
Autoignition temperature:	> 450 °C (> 842 °F)
Decomposition temperature:	Approximately 380 °C (716 °F)
Softening point:	109 °C (228.2 °F)
Bulk density:	Approximately 608.7 kg/m3

10. Stability and reactivity

Hazardous Reactions

Hazardous polymerisation does not occur.

Stability

Stable

Materials to avoid

None known.

Conditions to avoid

None known.

Hazardous decomposition products

By Fire and Thermal Decomposition: Phenol; Carbon oxides, Hazardous decomposition products due to incomplete combustion.

11. Toxicological information

Toxicity Data for Talc (non-asbestos form)

Skin irritation

rabbit, No skin irritation

Eye irritation

rabbit, No eye irritation

Mutagenicity

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium)

Genetic Toxicity in Vivo:

Dominant Lethal Assay: Negative results were reported in various in vivo studies. (rat,)

Negative results were reported in various in vivo studies.

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Developmental Toxicity/Teratogenicity

rat, female, oral, gestation, daily, NOAEL (teratogenicity): 1,600 mg/kg,

No Teratogenic effects observed at doses tested.

rabbit, female, oral, gestation, daily, NOAEL (teratogenicity): 900 mg/kg,

No Teratogenic effects observed at doses tested.

Toxicity Data for Flame Retardant**Acute oral toxicity**

LD50: > 5,000 mg/kg (rat)

Acute dermal toxicity

LD50: > 2,000 mg/kg (rat)

Skin irritation

rabbit, Non-irritating

Eye irritation

rabbit, Mild eye irritation

Sensitisation

non-sensitizer (Guinea pig)

Repeated dose toxicity

28 days, Oral: NOAEL: 1,862 mg/kg, (rat, Male/Female, daily)

Mutagenicity

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies.

Toxicity Data for Impact Modifier**Toxicity Data for Zinc borate hydrate****Acute oral toxicity**

LD50: > 10,000 mg/kg (rat)

Acute inhalation toxicity

LC50: > 5 mg/l, (rat)

Acute dermal toxicity

LD50: > 10,000 mg/kg (rabbit)

Skin irritation

Non-irritating

Eye irritation

rabbit, Draize, Mild eye irritation

12. Ecological information**Ecological Data for Talc (non-asbestos form)****Biodegradation**

Not readily biodegradable.

Biochemical Oxygen Demand (BOD)

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0 mg/l

Chemical Oxygen Demand (COD)

0 mg/g

Bioaccumulation

Does not bioaccumulate.

Acute and Prolonged Toxicity to Fish

LC50: > 10,000 mg/l (Zebra fish (Brachydanio rerio), 24 h)

Ecological Data for Flame Retardant

Biodegradation

Not readily biodegradable.

Acute and Prolonged Toxicity to Fish

LC50: > 100 mg/l (Rainbow (Donaldson) Trout (Oncorhynchus mykiss), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC50: > 100 ppm (Water flea (Daphnia magna), 48 h)

Toxicity to Aquatic Plants

EC50: > 100 ppm, (96 h)

Toxicity to Microorganisms

EC50: > 1,000 mg/l,

Ecological Data for Zinc borate hydrate

Acute and Prolonged Toxicity to Fish

LC50: 2.4 mg/l (Rainbow trout (Salmo gairdneri), 96 h)

LC50: > 335 mg/l (Bluegill (Lepomis macrochirus), 96 h)

Acute Toxicity to Aquatic Invertebrates

76 mg/l (Water flea (Daphnia magna), 48 h)

13. Disposal considerations

Waste Disposal Method

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

14. Transport information

Land transport (DOT)

Non-Regulated

Sea transport (IMDG)

Non-Regulated

Air transport (ICAO/IATA)

Non-Regulated

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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):

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

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:

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
>=1%	Bisphenol A Polycarbonate	CAS# is a trade secret
7 - 13%	Talc (non-asbestos form)	14807-96-6
>=1%	Flame Retardant	CAS# is a trade secret
>=1%	Impact Modifier	CAS# is a trade secret
<=5%	Zinc borate hydrate	138265-88-0

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
<=5%	Zinc borate hydrate	138265-88-0

MA Right to Know Extraordinarily Hazardous Substance List:

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
<0.1%	Crystalline Quartz Silica	14808-60-7
<=3 ppm	Methylene Chloride	75-09-2

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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

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

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of Bayer MaterialScience LLC. The information in this MSDS relates only to the specific material designated herein. Bayer MaterialScience LLC assumes no legal responsibility for use of or reliance upon the information in this MSDS.

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