

Safety Data Sheet according to GB/T 16483 and GB/T 17519

TECHNOMELT PA 646 BLACK BG20KG

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V001.9

Revision: 21.02.2025 printing date: 31.07.2025

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

Product name: TECHNOMELT PA 646 BLACK BG20KG

Trade name: Macromelt OM 646

Intended use: Special hotmelt, based on polyamide

Manufacturer/Importer/Distributor Representative Company

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Chemical Accidents:

2. Hazards identification

EMERGENCY OVERVIEW:

Black, Resinous, solid

Classification of the substance or mixture according to GB 30000.1 (Specification for classification and labelling of chemicals—Part 1: General rules):

No classification required according to GB 30000.1 (Specification for classification and labelling of chemicals-Part1: General rules).

Label elements according to GB 15258 (General rules for preparation of precautionary label for chemicals):

No classification required according to GB 30000.1 (Specification for classification and labelling of chemicals-Part1: General rules).

Physical and chemical hazards:

Based on current information, there are no physical or chemical hazards.

Health hazards:

Based on current information, there are no health hazards.

Environmental hazards:

Based on current information, there are no environmental hazards.

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3. Composition / information on ingredients

Substance or Mixture:

Mixture

Declaration of the ingredients according to GB 30000.1:

| Hazard component CAS-No. | Content | GHS Classification | |
|--|------------|--|--|
| Bis(4-(1,1,3,3-tetramethylbutyl)phenyl)amine | 1- < 2.5 % | Chronic hazards to the aquatic environment 4 | |
| 15721-78-5 | | H413 | |

Only hazardous ingredients for which a classification according to GB 30000.1 is already available are displayed in this table. For full text of the Hazard statements see section 16 "Other information".

4. First aid measures

Description of necessary first-aid measures:

Skin contact: Molten product. After skin contact cool down immediately with cold water. Do not remove

adherent product. Seek medical advice.

Eye contact: After contact with the hot melt: cool with water, seek medical attention.

Inhalation: Move to fresh air, consult doctor if complaint persists.

Ingestion: Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

Most important symptoms/effects,

acute and delayed:

The most important known symptoms and effects are described in chapters 2 and/or 11.

Indication of any immediate medical attention and special

treatment needed, if necessary:

Post-exposure treatment should focus on controlling the patient's clinical symptoms and

signs.

5. Fire fighting measures

Suitable extinguishing media: water, carbon dioxide, foam, powder

Fire-fighting method: Do not store or use near heat, spark, open flame or other sources of ignition.

Special hazards arising from the

substance or mixture:

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

Special protective actions for fire-

fighters:

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency

procedures:

Wear protective equipment.

Environmental precautions: Do not empty into drains / surface water / ground water.

Methods and materials for containment and cleaning up:

Allow to solidify.

Remove mechanically.

Dispose of contaminated material as waste according to Section 13.

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7. Handling and storage

Precautions for safe handling: Do not wear contact lenses.

Avoid skin contact with molten resins.

Follow suggested application temperature.

Do not place wet or damp solid into melt tank.

Always be careful around molten material.

Hygiene measures: Do not eat, drink, smoke or take snuff while working.

Wash thoroughly after handling.

Keep absolute tidiness at the working place. Avoid contact with skin and eyes. Remove soiled or soaked clothing immediately. Wash off any contamination that gets onto the skin

with plenty of water and soap, skin care.

Conditions for safe storage, including any incompatibilities:

Refer to Technical Data Sheet.

8. Exposure controls / personal protection

Controls parameters:

Occupational Exposure Limits: no data available

Biological Exposure Indices: no data available

Engineering controls: Ensure good ventilation/extraction.

Respiratory protection: Suitable breathing mask when there is inadequate ventilation.

Eye protection: Protective goggles

Body protection: Wear protective equipment.

Hand protection: Suitable protective gloves.

9. Physical and chemical properties

Physical state: solid Appearance: Black Evaporation rate: Not available. Odor: Resinous

pH: Not applicable, Product is non- Melting point: 170 - 180 °C (338 - 356 °F)

soluble (in water).

Boiling point: > 280 °C (> 536 °F) Density: 0.95 - 1.01 g/cm3 Vapor density: Vapor pressure: Not available.

solid

Flash point: Not applicable Ignition temperature: Not available.

Lower explosive limit: Not available.

Solubility in water Insoluble Viscosity: 3,000 - 5,500 mPa.s

Auto-ignition temperature: Not available.

Not applicable, Product is a solid
The product is not flammable.

Octanol / water distribution Not applicable, Mixture Decomposition temperature: > 300 °C

coefficient:

VOC: Bulk adhesive

Thermoplastic Assembly Industry

50 g/kg, GB 33372-2020 Limit of volatile organic compounds content in adhesive

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10. Stability and reactivity

Reactivity: None if used for intended purpose.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: None if used properly.

Conditions to avoid: Excessive heat.

Incompatible materials: None if used properly.

Hazardous decomposition

products:

Carbon dioxide, carbon monoxide and irritating and/or toxic gases and particulate may be

generated by thermal decomposition or combustion.

11. Toxicological information

General toxicological information:

No laboratory animal data available.

Acute oral toxicity:

| Bis(4-(1,1,3,3- | Value type | LD50 | |
|-------------------------------|------------|--|--|
| tetramethylbutyl)phenyl)amine | Value | > 2,000 mg/kg | |
| 15721-78-5 | Species | rat | |
| | Method | OECD Guideline 423 (Acute Oral toxicity) | |

Acute dermal toxicity:

| Bis(4-(1,1,3,3- | Value type | LD50 |
|-------------------------------|------------|--|
| tetramethylbutyl)phenyl)amine | Value | > 2,000 mg/kg |
| 15721-78-5 | Species | rat |
| | Method | OECD Guideline 402 (Acute Dermal Toxicity) |

Acute inhalative toxicity:

| Bis(4-(1,1,3,3- | Value type | LC 50 |
|-------------------------------|---------------|-------------|
| tetramethylbutyl)phenyl)amine | Value | > 5.8 mg/l |
| 15721-78-5 | Exposure time | 1 h |
| | Species | Rat |
| | Method | |

Skin corrosion/irritation:

| Bis(4-(1,1,3,3- | Result | not irritating |
|-------------------------------|---------------|--|
| tetramethylbutyl)phenyl)amine | Exposure time | 4 h |
| 15721-78-5 | Species | rabbit |
| | Method | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

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Serious eye damage/irritation:

| Bis(4-(1,1,3,3- | Result | not irritating |
|-------------------------------|---------------|---|
| tetramethylbutyl)phenyl)amine | Exposure time | |
| 15721-78-5 | Species | rabbit |
| | Method | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |

Respiratory or skin sensitization:

| Bis(4-(1,1,3,3- | Result | not sensitising |
|-------------------------------|-----------|-----------------------|
| tetramethylbutyl)phenyl)amine | Test type | Patch-Test |
| 15721-78-5 | Species | human |
| | Method | Human volunteer study |

Germ cell mutagenicity:

| Bis(4-(1,1,3,3- | Result | negative | |
|-------------------------------|---|---|--|
| tetramethylbutyl)phenyl)amine | Type of study / Route of administration | bacterial reverse mutation assay (e.g Ames test) | |
| 15721-78-5 | Metabolic activation / Exposure time | with and without | |
| | Method | OECD Guideline 471 (Bacterial Reverse Mutation Assay) | |
| Bis(4-(1,1,3,3- | Result | ambiguous with metabolic activation | |
| tetramethylbutyl)phenyl)amine | Type of study / Route of administration | mammalian cell gene mutation assay | |
| 15721-78-5 | Metabolic activation / Exposure time | with and without | |
| | Method | OECD Guideline 476 (In vitro Mammalian Cell Gene | |
| | | Mutation Test) | |
| Bis(4-(1,1,3,3- | Result | negative | |
| tetramethylbutyl)phenyl)amine | Type of study / Route of administration | in vitro mammalian chromosome aberration test | |
| 15721-78-5 | Metabolic activation / Exposure time | with and without | |
| | Method | OECD Guideline 473 (In vitro Mammalian Chromosome | |
| | | Aberration Test) | |

Carcinogenicity

No data available.

Reproductive toxicity:

No data available.

STOT-single exposure:

No data available.

STOT-repeated exposure:

No data available.

Aspiration hazard:

No data available.

12. Ecological information

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General ecological information:

Do not empty into drains / surface water / ground water.

Toxicity:

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

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| C. C. N. | Value type | Value | Exposure time | Species | Method |
|--|---------------|-----------------------------|---------------|---------|---|
| Bis(4-(1,1,3,3- tetramethylbutyl)phenyl)amin e 15721-78-5 | LC50 | Toxicity > Water solubility | 96 h | , , | OECD Guideline 203 (Fish, Acute Toxicity Test) |

Toxicity (aquatic invertebrates):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous components | | Value | Exposure time | Species | Method |
|--|------|--------------------------------|---------------|---------|--|
| CAS-No. | type | | | | |
| Bis(4-(1,1,3,3- tetramethylbutyl)phenyl)amin e 15721-78-5 | | Toxicity > Water solubility | 48 h | | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |

Chronic toxicity (aquatic invertebrates):

No data available.

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

| Hazardous components | Value | Value | Exposure time | Species | Method |
|--|-------|--------------------------------|---------------|---------------------------------|--|
| CAS-No. | type | | | | |
| Bis(4-(1,1,3,3- tetramethylbutyl)phenyl)amin e 15721-78-5 | | Toxicity > Water solubility | 72 h | Pseudokirchneriella subcapitata | OECD Guideline 201 (Alga, Growth Inhibition Test) |

Toxicity (microorganisms):

No data available.

Persistence and degradability

| Hazardous components CAS-No. | Result | Test type | Degradability | Exposure time | Method |
|--|----------------------------|-----------|---------------|---------------|---|
| Bis(4-(1,1,3,3- tetramethylbutyl)phenyl)amin e 15721-78-5 | not readily biodegradable. | aerobic | 20 % | 28 d | OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) |

Bioaccumulative potential

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| Hazardous components CAS-No. | Bioconcentratio n factor (BCF) | Exposure time | Temperature | Species | Method |
|--|-----------------------------------|---------------|-------------|-----------------|--------|
| Bis(4-(1,1,3,3- tetramethylbutyl)phenyl)amin e 15721-78-5 | | 1,008 h | | Cyprinus carpio | |
| Bis(4-(1,1,3,3- tetramethylbutyl)phenyl)amin e 15721-78-5 | | | | Various | |

Mobility in soil:

| Hazardous components CAS-No. | LogPow | Temperature | Method |
|--|--------|-------------|---|
| Bis(4-(1,1,3,3- tetramethylbutyl)phenyl)amin e 15721-78-5 | 8.8 | 40 °C | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |

Endocrine disrupting properties

No data available.

Other adverse effects

No data available.

13. Disposal considerations

Product disposal: Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages: After use, tubes, cartons and bottles containing residual product should be disposed of as

chemically contaminated waste in an authorised legal land fill site or incinerated.

14. Transport information

Road transport CN_DG:

Not dangerous goods

Marine transport IMDG:

Not dangerous goods

Air transport IATA:

Not dangerous goods

Notice For Transportation: Transport according to local and national regulations. Ensure

containers will not leak, collapse, or being damaged when transported. DO NOT transport with incompatible materials. Transportation vehicle should be equipped with right fire-fighting equipment in case of emergency. Avoid solarization, drenched and high temperature when

transported.

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15. Regulatory information

The following laws and regulations lay down provisions in terms of chemicals safety use, storage, transportation, loading/unloading, classification as well as symbol.

"Law of the People's Republic of China on Work Safety".

Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases".

- "Law of the People's Republic of China on environmental protection".
- "Regulation on the Safety Management of Hazardous Chemicals".
- "Regulations on License to Work Safety".

16. Other information

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Others: The full text of all abbreviations indicated by codes in this safety data sheet section 3

are as follows:

H413 May cause long lasting harmful effects to aquatic life.