Safety Data Sheet

According to Regulation (EC) No. 1907/2006, as amended by Regulation (EU) 2020/878

Effective date: 2026-07-01

Version: 1.7

*b*FI A 3745

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: *b*FI A 3745
Product description: acrylate polymer
Product type: flow improver
REACH no.: No registration number has been assigned for this substance.
CAS RN: 9011-14-7
HS code: 3906 1000

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended for product use: Plastics processing: extrusion and compounding
Not recommended for product use: None known.

1.3. Details of the Supplier of the safety data sheet

Polytives GmbH
Breitscheidstraße 148-150
07407 Rudolstadt
Germany
+49 3672 37697 80
Email: info@polytives.de

Informing department
+49 3672 37697 80, weekdays 7:00 a.m.–5:00 p.m. (UTC+1), German/English

1.4. Emergency telephone number

Germany: Poison Control Center Berlin, +49 30 19240 (24 hours, German/English)
International emergency number: CHEMTREC, +1 703-527-3887 (24 hours, English)

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Not a hazardous substance or mixture according to CLP No. 1272/2008.

2.2. Label elements

Not a hazardous substance or mixture according to CLP No. 1272/2008.


Harmful to the environment—prevent losses.

2.3. Other Hazards

PBT/vPvB

This substance/mixture does not contain any components at concentrations of 0.1% or higher that are classified as either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

Endocrine disrupting properties
The product does not contain substances with the potential for endocrine disorders.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
General description: acrylate polymer
CAS number: 9011-14-7
EC number: 500-017-9
Index number: not assigned
HS code: 3906 1000 [Polymethyl methacrylate, in primary forms]
Concentration of SPM in the material: 100 wt-%

The substance is supplied in a quality that meets the specifications. Any impurities or minor components are only present in trace amounts and are not classified as hazardous according to Regulation (EC) No. 1272/2008 (CLP). The substance meets the criteria for a polymer in accordance with Article 3(5) of the REACH Regulation. There is no registration requirement for polymers. The monomers and other substances are registered where necessary.

3.2. Mixtures
Not applicable.

4. FIRST AID MEASURES

4.1. Description of first aid measures:
General information: If you feel unwell or have persistent symptoms, seek medical advice. Show this safety data sheet to the doctor treating you.
After inhalation: Move the affected person to fresh air. If respiratory irritation persists, seek medical attention.
After skin contact: Wash with water and mild soap. If mechanical irritation occurs, seek medical advice.
After eye contact: Rinse eyes with plenty of water for several minutes, keeping eyelids open. Remove contact lenses, if present and easy to do. If irritation persists, seek medical attention.
After swallowing: Rinse mouth thoroughly with water. Do not induce vomiting. Seek medical advice if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
- Mechanical irritation of the eyes and respiratory tract when exposed to dust.
- No known systemic effects when used as intended.

4.3. Indication of any immediate medical attention and special treatment needed
Perform symptomatic treatment.

5. FIRE FIGHTING MEASURES

5.1. Extinguishing media
Suitable extinguishing media: water spray, foam, extinguishing powder, carbon dioxide (CO_2)
Unsuitable extinguishing media: full water jet

5.2. Special hazards arising from the substance or mixture

- In case of fire, the following may be produced: carbon monoxide (CO), carbon dioxide (CO_2), acrylate monomer vapors, acrylic acid derivatives.
- The material may melt and flow in case of fire; molten material may adhere and cause thermal injuries.
- Low dust generation may contribute to dust explosion hazards when heated to high temperatures but is negligible under normal handling conditions.

5.3. Advice for firefighters

- Use self-contained breathing apparatus with positive pressure (EN 137).
- Wear heat-protective clothing.
- Cool containers near the fire with water.

5.4. Other information

Dispose of fire residues and contaminated extinguishing water in accordance with regulations (see Section 13).

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

- Avoid the formation of dust.
- In the event of large-scale release, be aware of the risk of slipping due to granules.
- Use personal protective equipment in accordance with Section 8.

6.2. Environmental precautions

- Prevent further leakage or spillage if this can be done safely.
- Do not allow to enter drains, surface water, or the ground.

6.3. Methods and material for containment and cleaning up

- Pick it up mechanically.
- Dispose of collected material according to Section 13.

6.4. Reference to other sections

- Personal protective equipment: see Section 8.
- Disposal: see Section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Avoid dust formation.
- During thermal processing/treatment, extraction measures are required on the processing machines.
- Take measures against electrostatic charging.
- During manufacturing, transport, and processing, measures must be taken to prevent releases. Spilled material must be collected and reused or disposed of as industrial plastic waste. Entry into water bodies or the sewer system must be prevented.

7.2. Conditions for safe storage, including any incompatibilities

- Store containers tightly closed in a cool (< 25 °C) and dry place.
- Protect from direct sunlight and moisture.

- Recommended storage class according to TRGS 510: 11 (combustible solids, without hazardous properties).
- Store with materials that are not strong oxidizing agents.

7.3. Specific end use(s)
For industrial use only. Not intended for sale or use by end consumers. Intended for use in plastics processing.
Permanently bound in the polymer matrix / contained in the final product.
See also Section 1.2 for additional recommended uses.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
Components with limit values that require monitoring at the workplace
No components with workplace-related limit values according to TRGS 900 or international limit value lists.

8.2. Exposure controls
Technical measures:

- Provide adequate general ventilation.
- When processing in closed systems or at elevated temperatures, provide local exhaust ventilation.

Personal protective equipment:

- Eye/face protection: Safety goggles with side protection in accordance with EN 166 or equivalent.
- Hand protection: Protective gloves made of nitrile rubber (NBR), material thickness ≥ 0.11 mm, breakthrough time > 480 min in accordance with EN 374.
- Skin protection: Apply skin protection cream before starting work and after finishing work.
- Respiratory protection: Not required under normal handling conditions. If necessary, use particle-filtering half-mask respirator type FFP2 in accordance with EN 149.

Monitoring of environmental exposure:

- Collect spilled material to prevent unintentional release into the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	solid, granules
Colour	transparent, colourless
Odor	specific odor, harmless
Odor threshold	not applicable
pH value	not applicable, as insoluble in water
Melting point/ softening point	ca. 40 °C
Boiling point	not applicable (decomposes before boiling)
Flash point	no data available
Vaporisation rate	not applicable, as not volatile

Flammability (solid, gas)	no data available
Explosion limits (lower/upper)	not applicable, as no flammable gas/vapor
Vapour pressure	no data available
Vapour density	not applicable, as solid material
Density	1.16 g/cm^3
Solubility in water	insoluble
Distribution coefficient: 1-Octanol/Water	not applicable, as insoluble material
Auto-ignition	no data available
Thermal decomposition	> 280 °C
Viscosity	not applicable, as solid material
Explosive properties	none
Oxidizing properties	none

9.2. Other information

Dust explosion class	not applicable, as granules

10. STABILITY AND REACTIVITY

10.1. Reactivity
The material is chemically inert under normal environmental conditions (room temperature, atmospheric pressure). No hazards are known regarding reactivity.

10.2. Chemical stability
Stable when stored and handled properly in accordance with Section 7.

10.3. Possibility of hazardous reactions
No dangerous polymerization reactions known. No reactions with water, weak acids, or weak bases under normal conditions.

10.4. Conditions to avoid
High temperature. Depolymerization starts at 280 °C.

10.5. Incompatible materials
Strong oxidizing agents can cause violent reactions. Highly soluble in ketones and chlorinated alkanes.

10.6. Hazardous decomposition products
Upon thermal decomposition: carbon monoxide (CO), carbon dioxide (CO_2), traces of acrylate monomers.

11. TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological effects

Acute toxicity
Due to its structure and composition, no acute toxicity is to be expected.

Corrosive/irritant effect on the skin
No skin irritation potential in granule form. Mechanical irritation due to abrasion possible.

Serious eye damage/eye irritation
Not harmful to the eyes in a toxicological sense. Mechanical irritation due to dust particles possible.

Respiratory or skin sensitization
No sensitizing properties known.

Summary of the assessment of CMR properties
No mutagenic or carcinogenic potential known or expected. No reproductive toxicity known or expected.

Specific target organ toxicity after single exposure
No target organ effects known.

Specific target organ toxicity after repeated exposure
No target organ effects known.

Aspiration hazard
Not hazardous by aspiration (solid material).

Symptoms related to physical, chemical, and toxicological properties

- Short-term contact: mechanical irritation of eyes or respiratory tract due to dust particles.
- Prolonged skin contact: mechanical abrasion possible.

11.2. Information on other hazards

Endocrine disrupting properties
The product does not contain substances with the potential for endocrine disorders.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Due to its chemical structure and insolubility in water, no acute aquatic toxicity is to be expected.

12.2. Persistence and degradability

Not readily biodegradable according to OECD criteria.

12.3. Bioaccumulative potential

Due to its chemical structure, bioaccumulation in the organism is not to be expected.

12.4. Mobility in soil

Very low mobility due to water insolubility.

12.5. Result of PBT and vPvB assessment
Does not meet the criteria for PBT or vPvB according to Annex XIII REACH.

12.6. Endocrine disrupting properties
The product does not contain substances with the potential for endocrine disorders.

12.7. Other adverse effects
No evidence of ozone depletion, photochemical ozone formation, or global warming effects. The material has not been fully tested for ecotoxicity, but studies on comparable polymers confirm its low environmental risk.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods (product)

- Waste from this product must be disposed of in accordance with local, national, and international regulations.
- Waste code (AVV, Germany): 07 02 13 – Waste from the manufacture, formulation, distribution, and use of plastics (waste that does not contain hazardous substances).
- Basel Waste Code: B3010 – Plastic waste suitable for reuse or recycling and not containing hazardous substances.
- Do not mix with hazardous waste.
- Material can be thermally recycled or disposed of in approved landfills.
- Do not discharge into wastewater. Collect residues and cleaning materials in a controlled manner and dispose of them in accordance with applicable regulations.

13.2 Waste treatment methods (packaging)

- Cardboard packaging
    - Material: recyclable corrugated cardboard
    - Waste code (AVV, Germany): 15 01 01 – Paper and cardboard packaging.
    - Recommendation: dispose of via waste paper recycling.
- Bags, sacks, plastic liners, big bags:
    - Waste code (AVV, Germany): 15 01 02 – Plastic packaging.
    - Recommendation: Energy recovery, as usually contaminated with product

Treat contaminated packaging as product (see 13.1).

13.3 Information for international customers
When exporting to countries with different waste classification systems, please observe national waste codes and disposal regulations.
In countries that apply the Basel Convention, the local regulations on the cross-border transport of plastic waste must be observed.

13.4 Recommended treatment prior to disposal

- Empty packaging completely.
- Do not clean packaging or its plastic components unless there is an established cleaning procedure and recycling method.

14. TRANSPORT INFORMATION

14.1 UN number
Not classified as dangerous goods according to ADR, RID, IMDG, IATA-DGR.
UN number: not applicable (not dangerous goods).

14.2 UN proper shipping name
- ADR/RID: not classified as dangerous goods
- IMDG: not dangerous goods
- IATA: not dangerous goods

14.3 Transport hazard class(es)
Not applicable.

14.4 Packing group
Not applicable.

14.5 Environmental hazards
Transportation must be carried out in suitable, closed containers.

14.6 Other information
Not applicable (product is not transported as bulk cargo within the meaning of the MARPOL Convention).

15. REGULATORY INFORMATION

15.1. Safety, health, and environmental regulations/legislation specific for the substance or mixture
This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 as amended by Regulation (EU) 2020/878.
The specified product falls within the scope of Annex XVII, entry 78 of Regulation (EU) 2023/2055. It is intended for use in industrial facilities in accordance with paragraph 4, letter a. Reporting obligations in accordance with Art. 78 lie with the distributor.

EU law
- REACH Regulation (EC) No. 1907/2006
- CLP Regulation (EC) No. 1272/2008

International Chemical Weapons Convention (CWC):
Not listed.

Regulation (EC) No. 649/2012 (PIC Regulation, export and import of dangerous chemicals):
Not listed.

Candidate List of Substances of Very High Concern (SVHC):
No ingredients contained.

Water hazard class: nwg
Identification number: 766 [Plastics, e.g. granulates, formed parts, fibres, foils, polymer resins, in solid form, not dispersed, insoluble in water and indifferent]

National regulations

Country	inventory	status
AU	AICIS	listed, CR number: 12065
JP	NITE-CHRIP	listed, CRIP_ID: C005-040-67A

For a complete overview of all relevant chemical lists and compliance with applicable regulations, please refer to our compliance bulletin.

15.2 Chemical safety assessment
No substance safety assessment has been carried out for this product as it is not classified as hazardous.

16. OTHER INFORMATION

Changes made
1.1: Adaption of the registered business address and emergency- and phone number.
1.2: CAS RN added.
1.3: Statement to endocrine disrupting properties added (2.3, 11.2, 12.6 and 12.7).
1.4: National regulations updated.
1.5: Various adjustments and clarifications, including contact details, reference numbers, disposal and transport instructions.
1.6: Addition of the HS code, as well as information required under the Pellet Loss Regulation
1.7: Addition of water hazard class and Kst-value

Important literature and data sources
Relevant manuals and publications.
Own studies.
Toxicological and ecotoxicological studies of other manufacturers.

List of relevant phrases (code and wording as indicated in chapters 2 and 3).
Not relevant.

DISCLAIMER

The above information is given by us to the best of our knowledge and is corroborated by our own tests and investigations. However, the use of the product must be checked for the specific conditions of the customer, as we cannot safeguard and consider all mixtures, dosages, production, and operating conditions. Therefore, the information in this document is not considered a warranted property. We do not consider ourselves responsible or liable for any use of our product outside the recommended applications. This also includes patent infringements.