

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY

1.1 Product identification:

Commercial product name: Blupolymer Granule

Description: Polyolefin substance or mixture material in compliance with the Standard UNI 10667

1.2 Relevant proper use of the substance or mixture and improper use:

- material in extrusion processes or injection moulding and additive for insulating
- bitumen modifier for waterproof membrane or road pavements
- any other application admitted by the applicable rules

The mixture cannot be used to produce packaging intended to come into direct contact with food.

1.3 Details of the supplier of the safety data sheet:

I. Blu S.r.l., Via Basaldella 90, Passignano di Prato (Ud)

Tel. +39 0432 693511 - Fax +39 0432 691044

The product is obtained and distributed by the establishment of Via Matteotti 1160, Costa di Rovigo (Ro)

Tel. +39 0425 497548 - Fax +39 0425 497094

e-mail environment, safety and quality office: asq@idealservice.it

1.4 Emergency telephone:

Tel. +39 0425 497548 - Fax +39 0425 497094

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The mixture is classified as not hazardous according to Community directives 1999/45/EEC, 1967/548/EEC, EU regulation 1272/2008 (CLP) and amendments.

2.2 Label elements

The preparation is classified as not hazardous according to Community directives 1999/45/EEC, 1967/548/EEC, EU regulation 1272/2008 (CLP) and amendments.

2.3 Other hazards

Main risks to health

This preparation is considered to have no negative effects on human health in the form in which it is placed on the market and during proper industrial processing.

Main risks to the environment

The preparation is stable and inert under normal handling and storage conditions. It does not present any significant risk to the environment.

Risk of explosion

Friction due to the sliding of the preparation creates electrostatic loads that emit small sparks, which, in the presence of combustible materials, may provoke fire or, in particular energy conditions, even explosions.

Finely dispersed dusts may form explosive mixtures in air.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixture

Polyolefin mixture: Polyethylene (C₂H₄)_n and polypropylene (C₃H₆)_n

Composition – information on ingredients

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CAS	Ingredient	Percentage (%)	Hazard symbol and R-phrases
9002-88-4 9003-07-0	Polyolefin	> 90%	//
	Other	< 10%	

Although the originating products may contain additions of lubricating, stabilizing agents and pigments, these are not present in quantities such as to make the product hazardous, pursuant to Community Directives 67/548 and 99/45.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation

Inhalation of the product is not possible as it is.

Inhalation of fine particles and/or fumes produced during thermal treatment could cause irritation to the respiratory tract. In this case, move the person away from the polluted area. If discomfort persists, seek immediate medical attention.

In the case of accidental exposure to combustion fumes, remove from the area of exposure to fresh air as soon as possible, make the affected person sit down, loosen clothing and, if breathing difficulties persist, call emergency medical care.

Skin contact

The preparation is not generally a skin irritant. In case of allergy or irritation, wash the affected area with soap and water.

If molten polymer comes into contact with the skin, it may cause serious burns.

Do not attempt to remove the molten polymer from the skin, do not tear clothing, cool quickly with cold water and seek emergency medical care.

Eye contact

Fine dusts may cause irritation.

Should a particle enter the eye cavity, it should be removed in the same way as any other foreign body. Wash with plenty of water keeping the eyelids open. Do not rub eyes; if the irritation persists, seek medical care.

Ingestion

Generally, no specific measures are required in case of ingestion of the preparation as it is.

4.2 Most important symptoms and effects, both acute and delayed

When exposed as outlined in the previous paragraph, the product may cause irritation, redness or inflammation in people who have allergies. If necessary, seek medical care.

4.3 Indication of any immediate medical attention and special treatment needed Not applicable.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: powder, water, foam extinguishers and water.

Unsuitable extinguishing media: CO2 extinguishers.

5.2 Special hazards arising from the substance or mixture

The mixture is combustible and, in case of fire, it produces hydrocarbon combustion products (carbon monoxide, carbon dioxide and water) in the form of dense, toxic, hypoxic and irritant fumes.

5.3 Advice for firefighters

In case of diffused fire, cool with plenty of nebulized water. Use suitable heat protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Release of the mixture in the working environment does not require any particular precaution. If there are other emergencies, follow the normal procedures outlined in the emergency plan.

6.2 Environmental precautions

Prevent dispersion of the product on soil and in water resources by using suitable barriers.

Collect the granules and store them separately in labelled containers and send them for recycling or consult specialists for proper disposal according to local and/or national regulations in force.

6.3 Methods and materials for containment and cleaning up

Collect the flakes/pellets with manual and/or mechanical cleaning tools.

6.4 Reference to other sections

Not applicable.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

During thermal processing of the mixture, avoid inhalation of fumes and vapours, making sure that there is suitable air exchange. Wear work clothing and personal protective equipment (gloves, eyewear and use a FFP2 filter mask).

Avoid formation of dust and dust deposits. In the case of dust, if classification of areas where explosive dust atmospheres may occur, suitable electrical and non-electrical equipment is necessary. Where envisaged in the risk assessment, anti-spark tools must be used.

All equipment must be properly connected to the earthing system so that any accumulated static electricity is dissipated.

As outlined in the general standards on hygiene, do not eat or drink in the working area and wash hands frequently.

7.2 Conditions for safe storage, including any incompatibilities

The preparation must be stored in a cool, dry, aerated place, away from sources of heat, sparks and easily inflammable material.

To avoid packing from subsiding or falling, do not pile pallets.

Do not smoke or produce any type of flame in the storage areas. Avoid accumulating of dust. Keep the working area in an orderly and clean condition.

Regardless the intrinsic properties of the preparation, storage in damp area, or areas with strong sunlight and high temperatures can cause a variation in its technical characteristics.

7.3 Specific end use(s)

Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

In the absence of Italian limit values, those of the American ACGIH Association are taken in relation to non-toxic dust exposure (insoluble or poorly soluble particles that are not otherwise specified), namely:

- 10 mg/m³ for inhalable particles,
- 3 mg/m³ for breathable particles.

8.2 Exposure controls

In the premises for transforming the preparation, there must be a suitable fume-vapour-dust suction system and a suitable air exchange must be guaranteed.

During the heating cycle, the material can lead to the formation of hazardous products.

Respiratory protection

For thermal processing, use an FFP2 filter mask.

Hand protection

For thermal processing use protective gloves that are resistant to chemical products and/or high temperatures.

Eye protection

Inside and near the processing areas, use protective eyewear in compliance with the appropriate specifications.

Skin protection

Normally, no particular skin protections are required. The use of special clothing, besides normal work clothing, is recommended in particular situations.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state: solid in standard conditions

Form: granules in the form of small pellets, scales

Colour: grey / multicolor

Odour: smell of regenerated plastic from post-consume

Relative density: 0.8716 g/cm³ (gas displacement pycnometer (He))

Melting point: peak at 127° C (corresponding to the fraction of PE) and at 165 °C (corresponding to the fraction of PP) (differential scanning calorimetry DSC in nitrogen)

Water-solubility: insoluble

Decomposition Temperature: no effect observed below 280 °C (differential scanning calorimetry DSC in nitrogen)

Softening point: initial phenomenon at 40 °C (differential scanning calorimetry DSC in nitrogen)

Auto-ignition Temperature: 443°C (ASTM E 659-78)

9.2 Other information

Not applicable.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

The preparation is chemically inert under normal conditions of use and storage.

10.2 Chemical stability

The preparation is chemically stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

Not known.

10.4 Conditions to avoid

Transformation temperatures above 280 °C, storage near heat sources or inflammable liquids. Accumulation of electrostatic charges.

10.5 Incompatible materials

Not known.

10.6 Hazardous decomposition products

During a fire, it lets off the typical combustion products.

SECTION 11: TOXOLOGICAL INFORMATION

11.1 Information on the toxicological effects

No specific information is known or available regarding this mixture. Polyolefins are considered to be biologically inert.

Risks to the respiratory tracts

If the working conditions are not suitable and mainly at high temperatures, the fumes and vapours that

develop may irritate the respiratory tract.

Likewise, dust can irritate the respiratory tract.

Risks to the skin

Contact with the molten product may cause burns to be treated according to medical practices.

Risks to the eyes

Dust may cause mechanical irritation if it comes into contact with the eyes.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Polyolefins are polymers with a high molecular weight, practically inert from a biological viewpoint and considered not eco toxic.

As it is a solid and insoluble product, it is considered non-toxic in water.

12.2 Persistence/degradability

Polyolefins float in water.

Volatility: low; evaporation of the product in air is practically zero.

Biodegradability: can be persistent in the environment and it is not easily biodegradable.

UV degradability: existent, but with very low values.

12.3 Bio accumulative potential

Not applicable.

12.4 Mobility in soil

Not applicable.

12.5 Results of PBT and vPvB assessments

Not applicable.

12.6 Other adverse effects

Not applicable

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Must be disposed of in compliance with current laws (Legislative decree n°. 152/06 and amendments and/or

integrations), do not disperse in the environment or dump in sewers or waterways.

Dispose by regenerating and recycling, if feasible, or incinerate in accordance with local procedures and

through authorised companies.

SECTION 14 TRANSPORT INFORMATION

No regulations concerning transport of this preparation (ADR/RID for road and rail transport, ADNR for inland water transport, IMDG for sea transport, IATA for air transport).

14.1 UN number

Not applicable

14.2 UN shipping number

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

None

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations /legislation specific for the substance or mixture

The mixture is not classified at risk and therefore does not have to meet the compliance with Directive 88/379/EEC and amendments on labelling, Directives 67/548 EEC and 1999/45 EC on the classification of hazardous products and preparations and EU Regulation 1272/2008 (CLP).

15.2 Chemical safety assessment

Not applicable.

SECTION 16: OTHER INFORMATION

This preparation can be handled and stored according to common practices and existing industrial legislations. The information contained in this document is based on our knowledge, as of the **date** of publication. The information relates solely to the product indicated and constitutes no guarantee of particular quality. The user must check the suitability and completeness of such information in relation to the specific use intended. This technical data sheet cancels and replaces any previous edition.

Technical notes

The materials are subjected to constant quality controls. All data indicated refer to average values and do not exempt the customer from an accurate verification of conformity in his production cycle. In particular, not knowing the final applications of our products, the customer shall perform all tests and technical and regulatory verifications relating to the use thereof.

Being recycled material derived from post-consume, it may be subjected to oscillations.

In any case Idealservice does not take any liability for the uses that Purchaser as well as the End Users (or any other third parties) intend to make out of the Material; therefore Idealservice does not warrant any particular destination use for the material or any specific characteristic/quality that makes it suitable for the uses which the Customer intends to do with it. The product shall be used for the production of articles meeting law compliance, namely, it shall not be used to produce packaging material that comes into direct contact with food, unless otherwise specifically permitted by the applicable national law. The user of the product should act in full compliance with such legislation.