

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

1. Product identifier

Tradename: ABS Resin Natural

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

Identified uses: A polystyrene plastic Raw material for industrial treatment of articles or pieces. This product is recommended for use in accordance with the applications listed. Please contact your Sales Representative or Technical Service if you intend to use this product for other Applications.

3. Details of the supplier of the safety data sheet

Supplier: Laboratorio Geométrico S.L.

Calle Segunda (Polígono Industrial El Montalvo III), 4. 37188, Carbajosa de la Sagrada info@winkle.shop 670 37 88 29

2. HAZARDS IDENTIFICATION

1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2. Label elements

Labeling in accordance with Regulation (EC) No 1272/2008 (CLP):

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

3. Other dangers

No data available

The information in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate. This SDS contains a general summary of hazards known to Laboratorio Geométrico S.L., but does not purport to describe every hazard that exists. Laboratorio Geométrico S.L. and its subsidiaries ("Winkle") expect each customer or user of its products (each, a "User") to study this SDS carefully and consult appropriate expertise to become aware of any hazards associated with NatureWorks products. LABORATORIO GEOMÉTRICO MAKES NO WARRANTY, EXPRESS OR IMPLIED REGARDING THE INFORMATION CONTAINED HEREIN OR ITS PRODUCTS, INCLUDING BUT NOT LIMITED TO ANY WARRANTY AS TO ACCURACY OR COMPLETENESS OF INFORMATION, OR ANY IMPLIED WARRANTY OF MERCHAN-TABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

1. Mixture

This product is a mix

CAS registry number / CE No. / Index No.	REACH registration number	Concentration	Component	Classification: REGULATION (EC) No. 1272/2008
CAS Registry No. 9003-56-9 CE No. Polymer Index No.		>=99,5%	Styrene resin/ butadiene/acrylonitrile	Not qualified

If any of the non-classified components mentioned above, with their respective exposure value (OEL) described under section 8 without specification by country, is present in the product, the information on these will be displayed voluntarily.

4. FIRST AID MEASURES

1. Description of first aid measures

General information: First responders should pay attention to their own protection and use recommended personal protection (chemical resistant gloves, splash protection) See Section 8 for specific personal protective equipment in case there is a possibility of exposure.

Inhalation: Move affected person to fresh air. If effects occur, consult a doctor.

- **Skin contact:** Remove by washing with plenty of water. If necessary, request first aid or medical attention. If molten material comes into contact with the skin, do not apply ice, but cool with ice water or copious amounts of water. D0 N0T try to remove molten material from your skin. This could cause serious tissue damage. Seek medical attention immediately. An adequate safety and emergency shower should be immediately available.
- **Eye contact:** Flush eyes with water for several minutes. Remove contact lenses after 1 to 2 minutes and continue flushing your eyes for several more minutes. If side effects occur, contact a doctor, preferably an ophthalmologist.
- **Ingestion:** If ingested, seek medical attention. May cause gastrointestinal obstruction. Laxatives should not be administered. Vomiting should not be induced unless authorized to do so by medical personnel.



2. Most important symptoms and effects, both acute and delayed

In addition to the information detailed in the sections Description of first aid (above) e Indication of any medical attention and special treatment that should be provided immediately (below); Section 11: Toxicological Information includes the description of some additional symptoms and effects.

3.Indication of any immediate medical attention and special treatment needed Notes to Physician:

If there are burns, treat them as thermal burns, after decontamination. If a wash of stomach, an endotracheal and/or esophageal control is recommended. The risk of pulmonary aspiration will be assessed in relation to toxicity. There is no specific antidote. The treatment of the exposure will be directed to the control of the symptoms and clinical conditions of the patient.

5. FIREFIGHTING MEASURES

1. Extinguishing media					
Suitable extinguishing media:	Fog or water spray/atomized. Chemical powder fire extinguishers. Carbon dioxide fire extinguishers. Foam.				
Unsuitable extinguishing media:	None known.				
2. Special hazards arising from the substance or mixture					
Hazardous Combustion Products	E During a fire, the smoke may contain the original material together with combustion products of varied composition that may be toxic and/or irritating. Combustion products may include, but are not limited to: Nitrogen oxides. Carbon monoxide. Carbon dioxide (CO2). Combustion products may contain traces of: Styrene. Hydrocyanic acid.				
Unusual Fire and Explosion Haza	rds: Pneumatic conveying and other mechanical maintenance operations can generate combustible dust. Do not allow dust to accumulate to reduce the potential for dust explosions. When incinerated, the product will give off dense smoke.				

3. Advice for firefighters

Fire Fighting Procedures:

Keep people away. Confine the fire and prevent unnecessary access. Moisten well with water to cool it down and prevent it from re-igniting. If the material is melted, do not apply a direct water jet. Use finely pulverized water or foam. Cool surroundings with water to locate fire zone. For small fires, manual dry powder or carbon dioxide fire extinguishers can be used.



Special protective equipment for fire fighting personnel:

Wear positive pressure self-contained breathing apparatus and fire-fighting protective clothing (includes fire-fighting helmet, jacket, pants, boots, and gloves). If fire protective equipment is not available or not used, fight the fire from a protected location or a safe distance.

6. ACCIDENTAL RELEASE MEASURES

1. Personal precautions, protective equipment and emergency procedures:

Spilled product may cause a slippery floor fall hazard. Use the equipment appropriate security. For additional information, see Section 8, Controls of exposure/individual protection.

2. Environmental precautions:

Prevent entry into soil, ditches, sewers, watercourses and/or groundwater. See section 12, Ecological information.

3. Methods and material for containment and cleaning up:

Contain spilled material if possible. Sweep. It will be collected in appropriate containers and duly labeled. See Section 13, Disposal Considerations, for additional information.

4. Reference from other sections:

If there are references to other sections, these have been established in the previous sections.

7. HANDLING AND STORAGE

1. Precautions for safe handling:

No smoking, open flames or ignition sources in handling and storage areas. Safe product handling requires good housekeeping and dust control. Avoid inhalation of fumes from the process. Use with adequate ventilation. Where appropriate, unique container handling information can be found on the product label. Workers should be protected from the possibility of contact with pulverized resin. Do not allow molten product to come into contact with eyes, skin, or clothing. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential risk of dust explosions, insulate and ground electrical equipment and prevent dust accumulation. Dust can burn from static discharge.

2. Conditions for safe storage, including any incompatibilities:

Store in accordance with good manufacturing practices.

3. Specific end uses:

See the technical information sheet of this product for more information.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

1. Control parameters

Exposure limits are listed below, if they exist.

Exposure limits have not been established for the substances listed in the composition, if any, it has been described.

2. Exposure controls

Engineering controls:

Use local exhaust ventilation, or other engineering controls to maintain ambient levels below any required or guideline exposure limits. In the event that there are no applicable required exposure limits or guidelines, general ventilation should be sufficient for most operations. Local ventilation may be necessary in some operations.

Occupational exposure controls

Eye/face protection:

Wear safety glasses (with side shields). Safety glasses (with side shields) should be in accordance with EN 166 or equivalent. If there is a possibility that particulate exposure could cause eye discomfort, wear motorcycle goggles. Chemical protection glasses (motorcyclist type or "goggles") must comply with standard EN 166 or equivalent. If exposure causes eye discomfort, wear a full facepiece respirator.

Body protection:

Hand protection:

Chemical protective gloves should not be necessary for handling this product. Skin contact should be minimal in accordance with general hygiene practices for this product. Wear insulating gloves for thermal protection (EN 407), when necessary. Wear gloves to protect against mechanical injury. The selection of gloves will depend on the job.

Other protection:

No special precautions are necessary, apart from wearing clean clothing that covers the whole body.

Respiratory protection:

Respiratory protection should be worn when there is the potential to exceed required or guideline exposure limits. In the event that there are no applicable guidelines or required exposure limit values, use respiratory protection when adverse effects, such as respiratory irritation or discomfort, have been manifested, or when indicated by the risk assessment process. Wear an approved air-purifying respirator when high temperature vapors are generated or when dust or mist is present.

Use the following CE approved air-purifying respirator: In the presence of dust/mist use a/a Particulate Filter, type P2. In the presence of vapors, acids, or dusts/mists, use an Organic Vapor Cartridge with a particulate pre-filter, type AP2

Environmental exposure controls

See SECTION 7 (Handling and Storage) and SECTION 13 (Disposal Considerations) for measures to avoid excessive environmental exposure during use and disposal.



9. PHYSICAL AND CHEMICAL PROPERTIES

1. Information on basic physical and chemical properties

Appearance **Physical state** Color Smell **Olfactory threshold** pН Melting Point/Range **Freezing point** Boiling point (760mmHg) Flashpoint Evaporation Rate (Butyl Acetate = 1) Flammability (solid, gas) Lower explosive limits Upper explosive limit Vapor pressure: Relative vapor density (air=1) Relative Density (water = 1) Water solubility Partition coefficient n-octanol/water **Auto-ignition temperature** decomposition temperature **Kinematic viscosity Explosive properties Oxidizing properties**

Granules Whitish Without smell No test data available Not available Not available Not available Not available **Closed cup** Not available No test data available no data available Not available no data available Not available Not available 1.05 - 1.07 Bibliography Insignificant no data available No test data available No test data available Not applicable No test data available No test data available

2. Other information

Molecular weight

No test data available

NOTE: The physical and chemical data given in Section 9 are typical values for the product, not constituting a specification.

10. STABILITY AND REACTIVITY

1. Reactivity:

No dangerous reaction known under conditions of normal use.

2. Chemical stability:

Steady.

3. Possibility of hazardous reactions:

Polymerization will not occur.



4. Conditions to avoid:

Avoid temperatures above 300 °C Exposure to elevated temperatures may cause product decomposition.

5. Incompatible materials:

None known.

6. Hazardous decomposition products:

Decomposition products depend on temperature, air supply, and the presence of other materials. Treatment may release fumes and other decomposition products. Polymer fragments can be released at temperatures above the melting point. Fumes can be irritating.

11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

1. Information on toxicological effects

Avoid temperatures above 300 °C Exposure to elevated temperatures may cause product decomposition.

Acute toxicity

Acute oral toxicity

Very low oral toxicity. No harmful effects expected from ingestion of small amounts. May cause obstruction if swallowed

The LD50 for ingestion of a single oral dose has not been determined.

Typical for this family of materials.

LD50, Rat, > 5,000 mg/kg Estimated.

Acute skin toxicity

Harmful effects are not anticipated by absorption through the skin.

The dermal LD50 has not been determined.

Typical for this family of materials.

LD50, Rabbit, > 2,000 mg/kg Estimated.

Acute inhalation toxicity

A single exposure to dust is unlikely to cause adverse effects. Vapors released during thermal processing may cause respiratory irritation.

The LC50 has not been determined.

Skin corrosion or irritation

Prolonged contact does not cause skin irritation.

Mechanical injury only.

Under normal process conditions, the material is heated to high temperatures; contact with material can cause burns.



Serious eye damage or irritation

Both the solid and the dust of the product can cause irritation or injury to the cornea, due to mechanical action.

Elevated temperatures may generate vapors in concentrations sufficient to cause eye irritation. Effects may include discomfort and redness.

Sensitization

For skin sensitization: No relevant data found.

For respiratory sensitization: No relevant data found.

Specific Target Organ Systemic Toxicity (Individual Exposure)

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

The additives are encapsulated in the product and are not expected to be released under normal processing conditions or in foreseeable emergencies.

Carcinogenicity No relevant data found.

Teratogenicity No relevant data found.

Reproductive toxicity

No relevant data found.

Mutagenicity No relevant data found.

Aspiration Hazard

Based on physical properties, an aspiration hazard is unlikely.

12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

1. Toxicity

Acute fish toxicity

The product is not expected to have an acute toxicity, but in pellets or beads it can cause, due to mechanical causes, adverse effects if ingested by birds or aquatic animals.



2. Persistence and degradability

Biodegradability:

This water-insoluble polymeric solid is expected to be inert in the environment. On exposure to sunlight, surface photodegradation is expected. No appreciable biodegradation is expected.

3. Bioaccumulative potential

Bioaccumulation:

Bioconcentration is not expected due to its high molecular weight (MW > 1000).

4. Mobility on soil

In the terrestrial environment, the material is expected to remain in the soil. In an aquatic environment, the material will sink and remain in the sediment.

5. Results of PBT and vPvB assessment

1. Information on toxicological effects Avoid temperatures above 300 °C Exposure to elevated temperatures may cause product decomposition.

6. Other adverse effects

No relevant data found.

13. DISPOSAL CONSIDERATIONS

1. Waste treatment methods

For an uncontaminated product, disposal can be done by mechanical or chemical recycling or energy recovery. In some countries, disposal in a landfill is allowed. For a contaminated product, the possible options are the same, although a further evaluation is required. For all countries, disposal methods must comply with national and provincial laws and any local and municipal legislation. All disposal methods must comply with the framework of the European Directives 2008/98/EC and its consequent adaptations, the National Laws and Regulations implemented, as well as the European Directives that deal with priority waste streams. The shipment of waste through States must comply with the European Regulation (EC) No 1013/2006 and its subsequent modifications.

Both the waste group of the European Waste Catalog in which this product must be framed and the code that corresponds to it will depend on the use made of it. Go to waste disposal services.



14. TRANSPORT INFORMATION

Classification for transport by ROAD and RAIL (ADR/RID):

1. ONU number	Not applicable
2. UN proper shipping name	Not regulated for transport
3. Transport hazard class(es)	Not applicable
4. Packaging group	Not applicable
5. Environmental hazards	Not considered dangerous for the environ- ment based on available data.
6. Special precautions for users	No data available.
Classification for SEA transport (IMO/IMDG)	
1. ONU number	Not applicable
2. UN proper shipping name	Not regulated for transport
3. Transport hazard class(es)	Not applicable
4. Packaging group	Not applicable
5. Environmental hazards	Not considered dangerous for the environ- ment based on available data.
6. Special precautions for users	No data available.
7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Consult IMO regulations before transporting ocean bulk



Classification for AIR transport (IATA/ICAO) 1. ONU number	Not applicable
2. UN proper shipping name	Not regulated for transport
3. Transport hazard class(es)	5
	Not applicable
4. Packaging group	Not applicable
5. Environmental hazards	Not applicable
6. Special precautions for users	No data available.

This information is not intended to be all inclusive of product specific legislative or operational information/requirements. Classifications for transport may vary depending on the volume of the container and different regional or national regulations. Additional information about the transport system can be obtained from an authorized sales or customer service organization representative. It is the responsibility of the transportation organization to comply with all applicable laws, regulations and rules relating to the transportation of the product.

15. REGULATORY INFORMATION

1. Safety, health and environmental regulations/legislation specific for the substance of mixture

REACh Regulation (EC) No. 1907/2006

This product only contains compounds that are on the list of substances that are pre-registered, registered or exempt from registration or are already considered registered in accordance with Regulation (EC) No. 1907/2006 (REACH)., Polymers are exempt from registration in the system REACH. All relevant starting materials and additives have been pre-registered, registered or exempted from registration under Regulation (EC) No. 1907/2006 (REACH)., The above statements about the registration status of the substance are provided in good faith and are assumed to be accurate, as is the effective date shown above. However, no warranty, express or implied, is offered. It is the obligation of the purchaser/consumer to ensure that they correctly understand the regulatory status of the product.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of the risks inherent in major accidents involving dangerous substances.

Listed in the Regulation: Not applicable

2. Chemical Safety Assessment

Not applicable



16. OTHER INFORMATION

Classification and procedure used to obtain the classification of mixtures according to Regulation (EC) No 1272/2008

This product is not classified as dangerous according to CE criteria.

Revision

Identification Number: 101198626 / A582 / Date: 09.19.2017 / Version: 5.0 The most recent revisions are marked with a bold double bar in the left margin of the document.

Information sources and references.

The department for the regulation of products (Product Regulatory Services) and those of communication of risks (Hazard Communications) prepare the SDS with the information extracted from internal references of the company.