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*SECTION 1: Identification of the substance/mixture and of the company/undertaking*

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**1.1 Product identifier**

**Material Name**

Zenoba ZE Types

**Synonyms**

Polypropylene, polyethylene , polyolefin, ...

**Substance Registration Number(s)**

01-2119447103-50-0206 01-2119462827-27-0238

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

**Identified uses**

bitumen modification, injection, extrusion, compounding, heat-pressing

**Uses advised against**

None known

**1.3 Details of the supplier of the safety data sheet**

Zenoba BVBA

Turnhoutsebaan 171 bus 120

2480 Dessel, Belgium

Phone: +32 (0) 14 38 91 91

**1.4 Emergency telephone number**

CHEMTREC: 1-800-424-9300 (U.S.); +1-703-527-3387 (International: Call Collect)

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*SECTION 2: Hazards identification*

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**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

None needed according to classification criteria

**2.2 Label elements**

**Labeling according to Regulation (EC) No. 1272/2008 [CLP]**

**Hazard symbols**

None needed according to classification criteria

**Signal word**

None needed according to classification criteria

**Hazard statements**

None needed according to classification criteria.

## Precautionary statements

### Prevention

None needed according to classification criteria.

### Response

None needed according to classification criteria.

### Storage

None needed according to classification criteria.

### Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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## SECTION 3: Composition / information on ingredients

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CAS EC No Registration No	Component Name Synonyms	1272/2008 (CLP)	Percent
9003-07-0 --	Polypropylene	--	100
9002-88-4 --	Polyethylene	--	100
1317-65-3 215-279-6 --	Limestone	--	10

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## SECTION 4: First aid measures

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### 4.1 Description of first aid measures

#### Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

#### Skin

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

#### Eyes

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

#### Ingestion

If a large amount is swallowed, get medical attention.

## 4.2 Most Important Symptoms/Effects

### Acute

No information on significant adverse effects.

### Delayed

No information on significant adverse effects.

## 4.3 Indication of Immediate Medical Attention and Special Treatment

No data available.

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### SECTION 5: Firefighting measures

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## 5.1 Extinguishing media

### Suitable extinguishing media

Use water spray, dry chemical, foam, or carbon dioxide.

### Unsuitable Extinguishing Media

None known

## 5.2 Special hazards arising from the substance or mixture

Slight fire hazard.

### Combustion

Oxides of carbon, aldehydes, hydrocarbons, ketones, hydrocarbon gases

### Fire Fighting Measures

Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

### Protective Equipment and Precautions for Firefighters

Wear personal protective clothing and equipment such as self-contained breathing apparatus (SCBA) for protection against possible exposure.

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### SECTION 6: Accidental release measures

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## 6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protective clothing and equipment, see Section 8.

## 6.2 Environmental precautions

Avoid release to the environment.

## 6.3 Methods and Materials for Containment and Cleaning Up

Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

## 6.4 Reference to other sections

Safe handling: see section 7. Personal protection equipment (PPE): see section 8. Disposal: see section 13.

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*SECTION 7: Handling and storage*

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**7.1 Precautions for safe handling**

Wash thoroughly after handling.

**7.2 Conditions for safe storage, including any incompatibilities**

None needed according to classification criteria.

Keep separated from incompatible substances.

**Incompatible Materials**

oxidizing materials, peroxides, chlorine, hydrogen peroxide, nitric acid, POTASSIUM PERMANGANATE

**7.3 Specific end use(s)**

Industrial

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*SECTION 8: Exposure controls/personal protection*

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**8.1 Control parameters**

**Component Exposure Limits**

Limestone	1317-65-3
Belgium:	10 mg/m <sup>3</sup> TWA
Greece:	10 mg/m <sup>3</sup> TWA inhalable fraction; 5 mg/m <sup>3</sup> TWA respirable fraction
Ireland:	10 mg/m <sup>3</sup> TWA total inhalable dust; 4 mg/m <sup>3</sup> TWA respirable dust
	30 mg/m <sup>3</sup> STEL (calculated) total inhalable dust; 12 mg/m <sup>3</sup> STEL (calculated) respirable dust
United Kingdom:	10 mg/m <sup>3</sup> TWA inhalable dust; 4 mg/m <sup>3</sup> TWA respirable dust
	30 mg/m <sup>3</sup> STEL (calculated) inhalable dust; 12 mg/m <sup>3</sup> STEL (calculated) respirable dust

**EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures**

There are no biological limit values for any of this product's components.

**Derived No Effect Levels (DNELs)**

No DNELs available.

**Predicted No Effect Concentrations (PNECs)**

No PNECs available.

## 8.2 Exposure Controls

### Engineering controls

Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

### Eye/face protection

Wear splash resistant safety goggles. Use eye protection according to EN 166, designed to protect against liquid splashes. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

### Skin Protection

Wear appropriate chemical resistant clothing.

### Respiratory Protection

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

### Glove Recommendations

Wear appropriate chemical resistant gloves. Wear suitable gloves tested to EN374.

### Environmental exposure controls

Avoid release to the environment.

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## SECTION 9: Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

Appearance	Granules, flakes, powder	Physical State	Not available
Odor	Not available	Color	Not available
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	Not available
Freezing point	Not available	Evaporation Rate	Not available
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Autoignition	Not available	Flash Point	Not available
Lower Explosive Limit	Not available	Decomposition	Not available
Upper Explosive Limit	Not available	Vapor Pressure	Not available
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	Not available

Water Solubility	Not available	Partition coefficient: n-octanol/water	Not available
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Viscosity	Not available	Solubility (Other)	Not available
Density	<1 g/m <sup>3</sup>	Physical Form	Granules, flakes, powder
Volatility	<0.5 % (2 hr at 180 °C)	Molecular Weight	Not available

### Solvent Solubility

#### Soluble

hot decalin, hot tetrahydronaphthalene, hot tetrachloroethane

#### Insoluble

cold organic solvents

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## SECTION 10: Stability and reactivity

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### 10.1 Reactivity

No reactivity hazard is expected.

### 10.2 Chemical stability

Stable at normal temperatures and pressure.

### 10.3 Possibility of hazardous reactions

Will not polymerize.

### 10.4 Conditions to avoid

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

### 10.5 Incompatible materials

oxidizing materials, peroxides, chlorine, hydrogen peroxide, nitric acid, POTASSIUM PERMANGANATE

### 10.6 Hazardous decomposition products

oxides of carbon. aldehydes. hydrocarbons. ketones. gases.

### Thermal decomposition products

miscellaneous decomposition products

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## SECTION 11: Toxicological information

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### 11.1 Information on toxicological effects

#### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified

#### Irritation/Corrosivity Data

May cause respiratory tract irritation.

#### Respiratory Sensitization

No information available for the product.

**Dermal Sensitization**

No information available for the product.

**Germ Cell Mutagenicity**

No information available for the product.

**Tumorigenic Data**

No information available for the product.

**Component Carcinogenicity**

Polypropylene	9003-07-0
IARC:	Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))
Polyethylene	9002-88-4
IARC:	Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))

**Reproductive toxicity**

No information available for the product.

**Specific Target Organ Toxicity - Single Exposure**

No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

No data available.

**Aspiration hazard**

No information available for the product.

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*SECTION 12: Ecological information*

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**12.1 Toxicity**

**Component Analysis - Aquatic Toxicity**

No LOLI ecotoxicity data are available for this product's components

**12.2 Persistence and degradability**

No information available for the product.

**12.3 Bioaccumulative potential**

No information available for the product.

**12.4 Mobility in soil**

No information available for the product.

**Bioconcentration factor (BCF)**

No information available for the product.

**12.5 Results of PBT and vPvB assessment**

No information available for the product.

**12.6 Other adverse effects**

No information available for the product.

SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

**13.1.1 Product/Packaging disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations. Waste codes/waste designations according to EWC/AVV. EWC-code : 16 01 99 .

**13.1.2 Waste treatment relevant information**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**13.1.3 Sewage disposal-relevant information**

Avoid release to the environment.

**13.1.4 Other disposal recommendations**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**SECTION 14: Transport information**

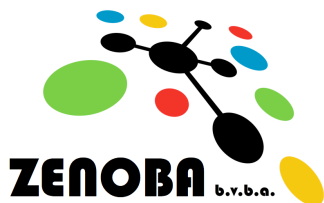
**Component Marine Pollutants (IMDG)**

Not regulated as dangerous goods.

		ADR	RID	ICAO	IATA	ADN	IMDG
14.1	UN Number	Not Regulated	Not Regulated	Not Regulated	Not Regulated	Not Regulated	Not Regulated
14.2	UN Proper Shipping Name	--	--	--	--	--	--
14.3	Transport Hazard Class(es)	--	--	--	--	--	--

14.4	Packing Group	-	-	-	-	-	-
14.5	Environmental Hazards	-	-	-	-	-	-
14.6	Special Precautions For User	-	-	-	-	-	-
14.7	Transport in Bulk According to Annex II or MARPOL 73/78 and the IBC Code	-	-	-	-	-	-
14.8	Additional information	-	-	-	-	-	-





### International Bulk Chemical Code

This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

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*SECTION 15: Regulatory information*

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

#### EU - REACH (1907/2006) - Annex XIV List of Substances Subject to Authorization

No components of this material are listed.

#### EU - REACH (1907/2006) - Article 59(1) Candidate List of Substances Subject to Authorization

No components of this material are listed.

#### EU - REACH (1907/2006) - Annex XVII Restrictions of Certain Dangerous Substances, Mixtures and Articles

No components of this material are listed.

#### EU - Biocides (1451/2007) - Existing Active Substance

No components of this material are listed.

#### Germany Regulations

##### Germany Water Classification

Limestone (1317-65-3)

ID Number 317 , not considered hazardous to water

#### Denmark Regulations

No components of this material are listed.

### 15.2 Chemical Safety Assessment

For this substance a chemical safety assessment is not required.

#### Component Analysis - Inventory

Polypropylene (9003-07-0)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes

Polyethylene (9002-88-4)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes

Limestone (1317-65-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	NSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes

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*SECTION 16: Other information*

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**16.1 Indication of changes**

New SDS: 11/23/2015

**16.2 Key / Legend**

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

**16.3 Key literature references and sources for data**

Available upon request.

**16.4 Methods Used for Classification of Mixture According to Regulation (EC) No 1272/2008**

Available upon request.

**16.5 Relevant H- and EUH-phrases (Number and full text)**

None needed according to classification criteria

**16.6 Training advice**

Read the Safety Data Sheet before handling product.

**16.7 Further Information**

**Disclaimer:**

Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.