

ZAPSIBNEFTEKHIM LLC

SAFETY DATA SHEET

According to Regulations (EC) 1907/2006 (REACH), (EC) 1272/2008 (CLP) & (EU) 2015/830

POLYPROPYLENE COPOLYMER WITH ETHENE

Version: 1.0

Created: 07/11/2019

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1. Product identifier

Product form:	Substance
Substance name:	Polypropylene copolymer with ethene
Trade names:	PP R 251 IM/3; PP R 481 IM/3; PP R 751 IM/3; PP R 003 EX/3; PP I 003 EX/3; PP I 013 EX/3; PP I 122 IM/3; PP I 212 IM/3; PP I 452 IM/3; PP I 482 IM/3; PP I 702 IM/3
Chemical name:	1-Propene, polymer with ethene
EC index No.:	Not applicable
EC No.:	618-455-4
CAS-No.:	9010-79-1
REACH registration No:	Not applicable
Formula:	$(-\text{CH}_2-\text{CH}(\text{CH}_3)-)_n(-\text{CH}_2-\text{CH}-)_m$
Synonyms:	PP; Olefin copolymer; ethylene/propylene copolymer; Polyolefin

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

1.2.1. Relevant identified uses

Use of the substance/mixture:	Identified use(s): Use in production of articles for technical and domestic purposes (sheets, films, strips, fibres, pipes, fittings, filaments, tape yarn, wrappings, nonwoven fabric), technical goods for medical and food industry and for consumer use, toys.
Most common technical function of substance:	Films

1.2.2. Uses advised against

Restrictions on use:	Uses other than those given in section 1.2.1 are not recommended unless an assessment is completed, prior to commencement of that use, which demonstrates that the use will be controlled
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1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	ZapSibNeftekhim LLC
Address:	Promzona, 626150, Tobolsk, Tyumen region, Russian Federation
Contact phone:	+7 (3456) 398-056
Emergency phone:	+7 (3456) 398-755; +7 (3456) 398-722
Fax:	+7 (3456) 266-449
Email Address:	ZapSib2@sibur.ru; servicedbp@sibur.ru

1.4. Emergency telephone number

Emergency phone in the country of delivery	112 (Please note that emergency numbers may vary depending upon the country of delivery though 112 remains valid as universal number)
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SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Not classified.

2.2. Label elements

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

Hazard pictograms (CLP): Not applicable.

Signal word (CLP): Not applicable.

Hazard statements (CLP): Not applicable.

Precautionary statements (CLP): Not applicable.

EUH-statements: Not applicable.

2.3. Other hazards

Other hazards not contributing to the classification: No significant health hazard in normal industrial use conditions. Contact with melted/heated product may cause thermal burns. Granulated polypropylene copolymer at temperature lower than 150 °C does not emit into the air or environment any toxic substances and causes no harmful influence on human organism at direct contact at room temperature. In the course of polypropylene copolymer processing, when heating it up to 150 °C and over, the emission of volatile products of thermal-oxidative degradation is possible (see section 10). Products of thermal-oxidative degradation at long term inhalation cause generic toxic, irritating and allergic effects (see sections 8; 10). Dust may irritate respiratory system, eye irritation. Combustible solid. Dust may form explosive mixes with air. Product may be charged electrostatically. No other hazards identified.

Assessment PBT / vPvB: According to Annex XIII of Regulation (EC) No.1907/2006 (REACH):
 - not fulfilling PBT (persistent/bioaccumulative/toxic) criteria;
 - not fulfilling vPvB (very persistent/very bioaccumulative) criteria.

Remark: Refer to Section 15 for classification and labelling according to UN-GHS.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Name	Product identifier	%	Classification [CLP]
Ethylene-Propylene copolymer	(CAS-No.) 9010-79-1 (EC No.) 618-455-4	up to 100	none

*REACH Registration data for monomers:

Registration (EC name) for propene
 (CAS # 115-07-1; EC # 204-062-1); *Index No(CLP):601-011-00-9*
 (REACH-no) 01-2119447103-50-0195; 01-2119447103-50-0304
 Registration (EC name) for ethylene
 (CAS # 74-85-1; EC # 200-815-3); *Index No(CLP):601-010-00-3*
 (REACH-no) 01-2119462827-27-0399

The product does not contain impurities or additives that could affect product's labelling and classification according to Regulation (EC) No 1272/2008 (CLP).

3.2. Mixtures

Not applicable

SECTION 4. FIRST-AID MEASURES

4.1. Description of first aid measures

Product-specific hazards and other issues

Combustible material. Aerosol, polypropylene dust – explosive. Dust and/or thermal decomposition products inhalation may irritate respiratory system, eye irritation.

Spontaneous penetration of granulated polypropylene copolymer into human organism is impossible. Product at normal conditions is stable and non-volatile.

Warning before intervention: contact with hot product may cause severe thermal burns.

If eye/skin contact with hot product occurs, obtain immediate medical attention.

First-aid measures general

Move exposed person to fresh air. Keep person warm and at rest. Obtain medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

First-aid measures after inhalation

If there is respiratory distress give oxygen. If respiration stops or shows signs of failing, apply artificial respiration. Get medical attention.

First-aid measures after skin contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Obtain medical

attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse

If molten material comes in contact with the skin, do not apply ice but cool under ice water or running stream of water. DO NOT attempt to remove the material from skin. Removal could result in severe tissue damage. Seek medical attention immediately.

First-aid measures after eye contact

Rinse the eye immediately with plenty of water (low pressure) for at least 15 minutes occasionally lifting the upper and lower eyelids. Remove contact lenses. Get medical attention.

First-aid measures after ingestion

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Obtain medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

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

Symptoms/effects:

Symptoms/effects
after inhalation:

Dust of polypropylene copolymer: inhalation may irritate respiratory system, nasopharyngeal tickling, cough, mucous rhinorrhea and eye irritation.

Thermal decomposition products: dizziness, headache, weakness, drowsiness, fatigue, feeling of intoxication, pallor, reddening of the skin with a raspberry color shade, burns, rapid pulse, respiratory depression, shortness of breath, burning sensation in the chest, tearing, nausea, choking, vomiting. In more severe cases - convulsions, loss of consciousness.

Symptoms/effects
after skin contact:

Repeated and/or prolonged skin contact may cause irritation. Contact with hot product may cause serious burns.

Symptoms/effects
after eye contact:

Eye Contact may cause mechanical damage, irritation of eyes mucous. Contact with hot product may cause serious burns.

Symptoms/effects
after ingestion:

Ingestion/aspiration may cause irritation of digestive tract. May cause gastrointestinal blockage.

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

Advice to physician

If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media	Water fog or fine spray, Dry chemical fire extinguishers, Carbon dioxide fire extinguishers, Foam. Use only fine spray or water fog for extinguishing polypropylene copolymer dust.
Unsuitable extinguishing media	Do not use direct water jets. Direct water jets on the burning product could cause a steam explosion and spread of the fire. Avoid simultaneous use of foam and water on the same surface because the water destroys the foam.

5.2. Special hazards arising from the substance or mixture

Fire hazard:	The product is not flammable. Will burn if involved in a fire. May be combustible at high temperature.
Explosion hazard:	Polypropylene copolymer dust forms explosive mixtures with the air. Pneumatic conveying and other mechanical handling operations can generate combustible dust. Do not permit dust to accumulate to reduce the potential for dust explosions. Low flammability limit for polypropylene copolymer dust is 32.7 g/m ³
Hazardous decomposition products in case of fire:	Combustion products: Carbon oxides (CO and CO ₂) and soot. Combustion products may include thermo-oxidative degradation products: carbon oxides, formaldehyde, acetaldehyde, organic acids (acetic acid) and etc. The smoke may contain toxic and /or irritating not identified.

5.3. Advice for firefighters

Firefighting instructions:	Evacuate unnecessary personnel. Extinguish fire keeping safe distance. Cool endangered receptacles with water spray. Collect contaminated firefighting water separately. It must not enter the sewage system.
Protection during firefighting:	Firefighters should wear full protective clothing. Due to potential decomposition of the polymer, firefighters should be equipped with positive pressure self-contained breathing apparatus (SCBA)
Further information:	Spillages of molten material is possible. It makes surfaces slippery.

SECTION 6. ACCIDENTAL RELEASE MEASURE

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	Remove sources of ignition. No smoking. Do not touch or walk through spilt material. Avoid contact with skin and eyes. Avoid inhalation of fumes from molten product. No action shall be taken involving any personal risk or without suitable training. Keep unprotected persons away.
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6.1.2. For emergency responders

Emergency procedures	In case of fire, barricade the area. Spilled material may cause a slipping hazard. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. Ensure adequate ventilation. Remove sources of ignition. Take precautionary measures against static discharges. Avoid dust generation. Avoid inhalation of dusts. Use personal protection recommended in Section 8 of the SDS.
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6.2. Environmental precautions

Do not allow penetration of the product into water reservoirs, surface and ground water, sewer ducts and soil. Preventing disposal into water reservoirs of contaminated water without treatment. Monitor content of hazardous substances in the air. Provide sealing of process equipment. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body. Scattering of and its waste should be timely collected and disposed in specially designated areas. Polypropylene copolymer wastes are non-toxic and are not to be neutralized.

6.3. Methods and material for containment and cleaning up

Stop the spill, ventilate suspected area and let evaporate. Vacuum or sweep up. Collect in suitable and properly labelled containers. Minimize generation of dust during clean-up. Transfer to a container for disposal or recovery. Provide ventilation. All equipment must be grounded.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling	Put on appropriate personal protective equipment (see Section 8). During processing and thermal treatment of the product, small amounts of volatile hydrocarbons may be released. Provide adequate ventilation. Provide input-extract and local ventilation of work zones to ensure that the occupational exposure limit is not exceeded. Regularly control work zone air. In case of insufficient ventilation, wear suitable respiratory equipment (See Section: 8). Avoid inhalation of dust and decomposition fumes. Dust from the product gives a potential risk for dust explosion. All equipment shall be grounded. Avoid all sources of ignition. Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation. Dust can be ignited by static discharge. Take precautionary measures against static discharges. Provide thorough sealing and grounding of process equipment. Due to electrostatic properties of the material, grounding of silos and grounding of pneumatic transport equipment are obligatory. Pneumatic conveying and other mechanical handling operations can generate combustible dust. Do not permit dust to accumulate to reduce the potential for dust explosions. Handle in accordance with good industrial hygiene practice. Do not swallow. Avoid direct contact with skin and eyes. Do not ingest or inhale combustion or decomposition products. Workers should be protected from the possibility of contact with molten product. Warning: spilled granules will cause slipping and fall.
Hygiene measures	Wash hands after handling. Observe good industrial hygiene practices. Do not eat, drink or smoke at the work place.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	Keep container tightly closed. Keep away from heat, sparks and flame. Protect from direct sunlight, atmospheric precipitation and incompatible substances.
Incompatible materials	Oxidising agents, acids, alkalis.
Storage area	Store in a dry, well-ventilated area at temperature not exceeding 30°C and at relative air humidity of 40-80%. Keep away from heat, sparks and flame. Protect from direct sunlight.

Keep away from sources of ignition - No smoking.
 Packaging materials: Big Bags made of polyethylene material. Soft specialized containers for loose products.
 Use a pallet beneath the bags to prevent direct contact with the ground and the water.

7.3. Specific end use(s)

Check the identified uses given in Section 1.2 of the SDS.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational Exposure Limits

For *Ethylene-Propylene copolymer* (CAS: 9010-79-1): not established
 Elevated temperatures or mechanical action during processing may form hazardous dust and substances with occupational exposure limit values

for Dust (inhalable and respirable): International Limit Values¹⁾

SUBSTANCE Dust, inhalable (1); Dust respirable (2)	LTEL TWA ppm	LTEL TWA mg/m ³	STE L ppm	STEL mg/m ³	Note
European Union					
Austria		10 (1); 5 (2)		20(1); 10(2)	(2) 15 minutes average value
Belgium		10(1); 3(2)			
Denmark		10(1)		20(1)	
France		10(1); 5(2)			
Germany (AGS)		10(1); 1.25(2)			15 minutes average value,
Germany (DFG)		4(1); 1.5(2)			insoluble particulates
Hungary		10(1); 6(2)			

(1)(2)GESTIS International Limit values: http://bgia-online.hvbg.de/LIMITVALUE/WebForm_ueliste.aspx

for propene International Limit Values¹⁾

SUBSTANCE Propene CAS #115-07-1	LTEL TWA ppm	LTEL TWA mg/m ³	STEL ppm	STEL mg/m ³	Note
European Union					
Denmark	100	172	200	344	
Finland	500				
Ireland	500				
Latvia		100			
Poland		2000		8600	
Spain	500				
Sweden	500	900			
Switzerland	10000	17500			

(1)(2)GESTIS International Limit values: http://bgia-online.hvbg.de/LIMITVALUE/WebForm_ueliste.aspx

for ethene International Limit Values¹⁾

SUBSTANCE For ethen (CAS: 74-85-1)	LTEL TWA ppm	LTEL TWA mg/m ³	STEL ppm	STEL mg/m ³	Note
European Union					
Belgium	200				
Finland	200				
Latvia	100				
Spain	200				
Sweden	250	330	1000(1)	1200(1)	(1) 15 minutes average value

1) GESTIS International Limit values: http://bgia-online.hvbg.de/LIMITVALUE/WebForm_ueliste.aspx

Occupational Exposure Limits for the possible products of thermal-oxidative degradation (see section 10):					
for acetaldehyde: International Limit Values ¹⁾					
SUBSTANCE Acetaldehyde CAS #75-07-0	LTEL TWA ppm	LTEL TWA mg/m ³	STEL ppm	STEL mg/m ³	Note
European Union					
Austria	50	90	50	90	
Belgium	25	46			
Denmark	25	45	25	45	
Finland			25(1)	45(1)	(1) 15 minutes average value
France	100	180			
Germany (AGS)	50	91	50 (1); 100 (2)	91(1) 182(2)	(1) 15 minutes average value (2) Ceiling limit value
Germany (DFG)	50	91	50 (1)(2)	91(1)(2)	(1) 15 minutes average value (2) A momentary value of 100 ml/m ³ (180mg/m ³) should not be exceeded
Hungary		25		25	
Latvia		5			
Poland		5		45(1)	(1) Ceiling limit value
Romania	50	90	100(1)	180(1)	(1) 15 minutes average value
Spain			25	46	
Sweden	25	45	50(1)	90(1)	(1) 15 minutes average value
The Netherlands		37		92	
(1)(2)GESTIS International Limit values: http://bgia-online.hvbg.de/LIMITVALUE/WebForm_ueliste.aspx					
for Acetic acid: International Limit Values ¹⁾					
SUBSTANCE Acetic acid CAS # 64-19-7	LTEL TWA ppm	LTEL TWA mg/m ³	STEL ppm	STEL mg/m ³	Note
European Union					
Austria	10	25	20	50	
Belgium	10	25	15	38	
Denmark	10	25	20	50	
European Union	10	25	20(1)	50(1)	
Bold-type: Indicative Occupational Exposure Limit Values and Limit Values for Occupational Exposure Binding Occupational Exposure Limit Value - BOELV ~ (1) 15 minutes average value (for references see bibliography)					
Finland	5	13	10(1)	25(1)	(1) 15 minutes average value
France			10	25	
Germany (AGS)	10	25	20 (1)	50 (1)	(1) 15 minutes average value
Germany (DFG)	10	25	20	50	
Hungary		25		25	
Latvia	10	25			
Italy	10	25			
Poland		15		30	
Romania	10	25			
Spain	10	25	15	37	
Sweden	5	13	10(1)	25(1)	(1) 15 minutes average value
(1)GESTIS International Limit values: http://bgia-online.hvbg.de/LIMITVALUE/WebForm_ueliste.aspx					

for Formaldehyde: International Limit Values ¹⁾					
SUBSTANCE Formaldehyde CAS #50-00-0	LTEL TWA ppm	LTEL TWA mg/m ³	STEL ppm	STEL mg/m ³	Note
European Union					
Austria	0.3	0.37	0.6(1)	0.74(1)	(1) Ceiling limit value
Belgium			0,3	0,38	
Denmark	0,3	0,4	0,3	0,4	
Finland	0,3	0,37	1(1)	1,2(1)	(1) Ceiling limit value
France	0.5		1		
Germany (AGS)	0.3	0.37	0.6(1)	0.74(1)	(1) 15 minutes average value
Germany (DFG)	0.3	0.37	0.6(1)	0.74(1)	(1) 15 minutes average value (2) A momentary value of 1 ml/m ³ (1,2 mg/m ³) should not be exceeded.
Hungary		0.6		0,6	
Latvia		0.5			
Poland		0.5		1	
Romania	1	1,2	2(1)	3(1)	(1) 15 minutes average value
Spain		0,3	0,3	0,37	
Sweden	0,3	0,37	0,6(1)	0,74(1)	
The Netherlands		0,15		0,5	
(1)GESTIS International Limit values: http://bgia-online.hvbg.de/LIMITVALUE/WebForm_ueliste.aspx					

8.1.2. DNEL/ PNEC values

No information available.

8.2. Exposure controls

8.2.1. Technical safety measures

Appropriate engineering controls:

Provide adequate forced-air and exhaust ventilation in work zones to ensure that the occupational exposure limit is not exceeded. Compulsory monitoring of air conditions in work areas.

Sealing and grounding of equipment and communications. Usage of intrinsically safe equipment

8.2.2. Personal protection equipment

No significant health hazard in normal industrial use conditions.

Wear personal protective equipment during processing of polypropylene copolymer. Use of personal protective equipment must be consistent with good occupational hygiene practices.

Hand protection:

Wear approved protective gloves (Nitrile rubber BS EN 374)

If contact with hot product is anticipated, gloves should be heat-resistant and thermally insulated.

Wear insulating gloves BS EN407 (heat).

Eye protection:

Wear goggles giving complete protection to eyes (BS EN 166).

Skin and body protection:

Wear approved protective gloves (Nitrile rubber. BS EN 374)

If contact with hot product is anticipated, gloves should be heat-resistant and thermally insulated.

Wear insulating gloves BS EN407 (heat).

Wear apron or other protective clothing and antistatic boots.

Respiratory protection:

Not required (if is used workplace conditions).

In emergency or in case of increase of hazardous substances concentration at the workplace wear positive pressure MSHA/NIOSH-approved self-contained breathing apparatus (BS EN 14387:2004).

Environmental exposure controls:

None specific.

Do not allow penetration of the product into water reservoirs, surface and ground water, sewer ducts and soil. Preventing disposal into water reservoirs of contaminated water without treatment.

Monitor content of hazardous substances in the air. Content of dust in the air should be monitored.

Provide sealing of process equipment.

Other information:

Do not eat, drink or smoke while working. Wash hands at the end of each work shift and before eating, drinking, smoking or using the toilet. The usual precautionary measures for handling chemicals should be followed.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES	
9.1. Information on basic physical and chemical properties	
Physical state at 20 °C and 101.3 kPa	Solid. Granules.
Melting / freezing point	135-165 °C
Boiling point	Not applicable
Relative density	900-910 kg/m ³
Vapour pressure	Not applicable
Surface tension	Not applicable
Water solubility	Insoluble.
Partition coefficient n-octanol/water (log value)	Not available.
Flash point	350 – 370°C
Flammability	Does not ignite spontaneously, burn only upon entering into a source of fire.
Explosive properties	Non explosive. Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.
Self-ignition temperature	370 – 390°C
Oxidising properties	Not available
Viscosity	Not available
Granulometry	2-5 mm
Stability in organic solvents and identity of relevant degradation products	Insufficiently plumps at room temperature in organic solvents (acetone, benzene, toluene). At 100 °C PP dissolves in toluene, benzene, carbon tetrachloride.
Dissociation constant	Not available
9.2. Other information	
Flash point for polymer dust	350 °C
Minimum burning energy	0.08 J
Heat of combustion	45 MJ/kg
Water absorption in 24 h	0,01-0,03 %
Bulk specific gravity	470 – 600 kg/m ³
Upper/low flammability or Explosive limit ranges	Low flammability limit for dust 32 g/m ³ .

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under all ordinary circumstances at ambient temperatures, and if released into the environment.

10.2. Chemical stability

Stable under normal recommended conditions.

10.3. Possibility of hazardous reactions

Dust may form explosive mixture with air particularly in enclosed spaces.

10.4. Conditions to avoid

Avoid dust generation which may cause formation of explosive concentration.

Avoid heating of product up to 300 °C. Keep away from heat and sources of ignition.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

None under normal conditions at ambient temperatures.

Decomposition products can include and not limited to: formaldehyde, carbon oxide, carbon dioxide, acetaldehyde, organic acids (acetic acid), etc.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Routes of Exposure At ambient temperature the product is a non-volatile solid. There is no potential for inhalation exposure. If the product is handled at elevated temperatures this makes thermal burns the greatest acute hazard.

Acute toxicity

Ethylene-Propylene copolymer (CAS: 9010-79-1)

LD50, oral, rats	>5000 mg/kg bw, FBEPH. BT#000764, 2007
LC50, inhalation, rats	Not classified. No data available.
LD50, dermal, rats	Not classified. No data available.

Skin Not classified.

corrosion/irritation

Additional information Skin contact with melted/heated product may cause serious thermal burns.

Serious eye Not classified.

damage/irritation

Additional information Solid or dust may cause irritation or corneal injury due to mechanical action.
 Dust and/or thermal decomposition products may cause irritation of eye.
 Eye contact with melted/heated product may cause serious thermal burns.

Respiratory or skin Not classified.

sensitisation

Additional information Dust and/or thermal decomposition products inhalation may cause irritation of respiratory system.
 Products of thermal-oxidative degradation under long term inhalation cause generic toxic and highly irritating allergic influence.

Germ cell mutagenicity Not classified. No data available.

Carcinogenicity Not classified. No data available.

Toxicity for reproduction	Not classified. No data available.
STOT-single exposure	Not classified. No data available
Repeated dose toxicity	Not classified. No data available.
Aspiration hazard	Not classified. No data available.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

At normal conditions the product is a very stable. Does not form toxic compounds with other substances in air and water.

Pollution of water and soil with polymer flakes may occur only if production, handling and transportation rules are not followed, in case of effluent discharge without treatment, as a result of emergencies and accidents.

Aquatic toxicity:

Not expected to be toxic to aquatic life.

<i>Ethylene-Propylene copolymer (CAS: 9010-79-1)</i>	
Fish (Short-term toxicity)	
LC50 (96h)	No data available.
LC50 (96h))	No data available.
Fish (Long-term toxicity)	
NOEC (31 d)	No data available.
Aquatic invertebrates (Short-term toxicity)	
EC50 (48 h)	No data available.
EC50 (96 h)	No data available.
Aquatic invertebrates (Long-term toxicity)	
NOEC (21 d)	No data available
NOEC (28 d):	No data available
Algae and aquatic plants	
EC50/LC50 (96 h)	No data available
EC10/LC10 or NOEC	No data available
Toxicity to aquatic micro-organisms	
EC10 (18 h)	No data available

12.2. Persistence and degradability

Abiotic degradation:	No data available
Biodegradation	No specific ecological data are available for this product. This water-insoluble polymeric solid is expected to be inert in the environment. No appreciable biodegradation is expected
Persistence and degradability	No data available

12.3. Bioaccumulative potential

Aquatic bioaccumulation:	Effects on nature due to bioaccumulation are not known.
Secondary poisoning:	No data available

12.4. Mobility in soil

Biodegradation in soil:	No data available
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12.5. Results of PBT and vPvB assessment

Regarding all available data on biotic and abiotic degradation, bioaccumulation and toxicity it can be stated that the substance does not fulfill the PBT criteria (not PBT) and not the vPvB criteria (not vPvB).

12.6. Other adverse effects

Not available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste disposal recommendations	Disposal should be in accordance with local, state and national legislation. Waste water containing polypropylene copolymer should be treated. Packaging waste (paper bags) shall be collected and send for recycling. Plastic waste shall be removed to disposal.
European List of Waste (LoW) code	European Waste Code (2001/118/EC): 07 02 13 – waste plastic 20 01 39 – plastic

SECTION 14. TRANSPORT INFORMATION

General

The product is not covered by international regulations on the transport of dangerous goods. Polypropylene copolymer is transported by all modes of transport in covered vehicles in accordance with all rules of transportation for the transport mode.

UN: none.

14.1. Land transport (ADR/ RID)

Not regulated

14.2. Inland waterway transport (ADN)

Not regulated

14.3. Sea transport (IMDG)

Not regulated

14.4. Air transport (IATA/ICAO)

Not regulated

14.5. Special precautions for user

Always transport in closed containers. Ensure that persons transporting the product know what to do in the event of an accident or spillage. For information regarding Exposure Controls/Personal Protection see Section 8 of the SDS

14.6. Transport in bulk according to Annex II of Marpol and the IBC Code

Not regulated

SECTION 15. REGULATORY INFORMATION

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

15.1.1. EU-Regulations

Authorisations and/or restrictions on use (Annex XVII): Not applicable.

Ethylene-Propylene copolymer (CAS: 9010-79-1) is not on the REACH Candidate List.

Ethylene-Propylene copolymer (CAS: 9010-79-1) is not on the REACH Annex XIV List.

Other information, restriction and prohibition regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer. Annex II - Not listed.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances- (SEVESO III):

Not listed.

Directive 2013/39/EU priority substances in the field of water policy (amending Directive 2006/60/EC – Water Framework Directive and

Directive 2008/105/EC on environmental quality standards in the field of water policy): Not listed.

Regulation (EC) No 850/2004 on persistent organic pollutants: Annex III – Not listed.

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals:

Not listed.

15.1.2. Globally Harmonized System of Classification and Labelling of Chemicals (UN-GHS)

Classification according to UN-GHS:

Labelling according to UN-GHS:

Hazard pictogram(s) Not applicable.
 Signal word(s) Not applicable.
 Hazard Statement(s): Not applicable.
 Precautionary statement(s) Not applicable.

15.1.3. National regulations

Germany BfR – Recommendations on Food Contact Materials: XXI. Commodities based on Natural and Synthetic Rubber

Germany AwSV WGK nwg

Switzerland Packaging Inks Annex 10 Listed. Part B: non-evaluated substances. List IV. SML = 60 mg/kg.

15.2. Chemical safety assessment

Chemical Safety Report has been performed for *Propene* (CAS # 115-07-1; EC # 204-062-1) and *Ethylene* (CAS # 74-85-1; EC # 200-815-3)

SECTION 16. OTHER INFORMATION

16.1. Indication of changes

Version	Date of change	Section	Description of changes
1.0	07/11/2019	All	Initial SDS.

16.2. Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AGS	The German Committee on Hazardous Substances (Ausschuss für Gefahrstoffe – AGS)
BCF	Bioconcentration factor
DFG	Germany Research Foundation
DNEL	Derived No Effect Level
IMDG	International Maritime Dangerous Goods
ICAO-TI	Technical Instructions for the Safe Transport of Dangerous Goods by Air
K _{oc}	Adsorption coefficient
K _{ow}	octanol-water partition coefficient
LC50	Lethal Concentration to 50 % of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
LOAEC	Lowest Observable Adverse Effect Concentration
LTEL	Long Term Exposure Limit
NIOSH	National Institute for Occupational Safety and Health (USA CDC)
NOEC	No Observed Effect Concentration
NOAEL	No Observed Adverse Effect Level

OECD	Organization for Economic Co-operation and Development
OSHA	Occupational Safety & Health Administration (<i>USA</i>)
PNEC	Predicted No Effect Concentration
PBT	Persistent, bioaccumulative, toxic chemical
vPvB	Very Persistent, Very Bioaccumulative
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SCOEL	Scientific Committee on Occupational Exposure Limits
STEL	Short Term Exposure Limit
STP	sewage treatment plant
STOT	Specific Target Organ Toxicity
(STOT) RE	Repeated Exposure
(STOT) SE	Single Exposure
TWA	Time Weighted Average
UN	United Nations
SML	Specific migration limit
BfR	Federal Institute for Risk Assessment (<i>Germany</i>)

16.3. Full text of H- and EUH-statements:

Not applicable.

16.4. Key literature references and sources

DOCUMENTS, PROVIDED BY CONSORTIUM:

CHEMICAL SAFETY REPORT FOR *Propene* (CAS # 115-07-1; EC # 204-062-1) and *Ethylene* (CAS # 74-85-1; EC # 200-815-3)

EU DIRECTIVES

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Regulation (EC) No 1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Regulations. Commission regulation (EU) no 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

COMMISSION DECISION of 16 January 2001 amending Decision 2000/532/EC as regards the list of wastes (notified under document number (2001/118/EC).

UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations. The Control of Substances Hazardous to Health Regulations 1988. Health and Safety at Work Act 1974.

ENVIRONMENTAL LISTING

Control of Pollution Act 1974.

STATUTORY INSTRUMENTS

Notification of New Substances Regulations (NONS) 1993. The Export and Import of Dangerous Chemicals Regulations 2005 number 928.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply (EU 2001/59/EC). Safety Data Sheets for Substances and Preparations (REACH).

GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

16.5. Other Information

This product is a polymer and is not classified as dangerous under criteria Regulation (EC) No 1272/2008 (Regulation CLP). This polymer does not contain substances classified as dangerous under Article 59.2 Regulation (EC) No 1272/2008, namely:

- in an individual concentration of ≥ 1 % by weight for non-gaseous mixtures posing human health or environmental; or
- in an individual concentration of ≥ 0.1 % by weight for non-gaseous mixtures that is carcinogenic category 2 or toxic to reproduction category 1A, 1B and 2, skin sensitiser category 1, respiratory sensitiser category 1, or has effects on or via lactation or is persistent, bioaccumulative and toxic (PBT) in accordance with the criteria set out in Annex XIII or very persistent and very bioaccumulative (vPvB) in accordance with the criteria set out in Annex XIII; or
- a substance for which there are Community workplace exposure limits.

In accordance with mentioned above, this product does not require an official SDS as per Regulations (EC) No 1907/2006 (articles 31.1; 31.2) and Commission Regulation (EU) No 453/2010.

This SDS is developed in good faith to provide a customer with sufficient information allowing taking necessary measures to comply with relevant HSE requirements.

Training advice

Personnel handling the product has to be acquainted demonstrably with its hazardous properties, with health and environmental protection principles related to the product and first aid principles.

DISCLAIMER

This information is based on our current level of knowledge. This information may be subject to revision as new knowledge and experience becomes available, and SIBUR makes no warranties and assumes no liability in connection with any use of this information. Since SIBUR cannot be aware of all aspects of your business and the impact the REACH Regulation has for your company, SIBUR strongly encourages you to get familiar with the REACH Regulation in order to comply with its requirements and timelines.

END OF SAFETY DATA SHEET