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

1.1. Product identifier

Trade name	Polypropylene (PP)
Grades:	PP H030 GP/7; PP H031 BF/7; PP H032 TF/7, PP H036 BF/7; PP H038 TF/7; PP H080 GP/7; PP H085 CF/7; PP H120 GP/7; PP H250 GP/7; PP H253 FF/7; PP H263 FF/7; PP H270 GP/7; PP H270 FF/7; PP H350 GP/7; PP H350 FF/7
IUPAC name	
CAS No.	9003-07-0
CAS Name	Polypropylene
EINECS No.	
EC Index n°	
Type of product	homopolymer
EU REACH Registration N°.	
Formula	$(-CH2 – CH -)_n$ CH3
Name synonyms	polypropylene, homopolymer
BIG n°	

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

1.2.1. 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.

1.2.2. Uses advise against

No additional information available. The uses are provided in Section 1.2.1. Other uses are not recommended unless an assessment is completed, prior to commencement of that use, which demonstrates that the use will be controlled.

1.3. Details of the supplier of the safety data sheet

1.3.1. Producer/ Supplier

Legal entity name	"Kazakhstan Petrochemical Industries Inc." LLP
Adress	060000, Kazakhstan, Atyrau region, Atyrau city, ATYRAU-DOSSOR ROAD, building 295
Telephone	+7 701 521 12 01
E-mail (general)	reception@kpi.kz
Technical contact name	Denis Kozyrev
E-Mail (technical)	denis.kozyrev@kpi.kz

1.3.2. Only representative (for propene)

Legal entity name	Business Development & Intelligence srl

Adress	92, rue Omer Lepreux 1081 Koekelberg Belgium
Telephone (general)	+322 4144658
E-mail (general)	reach@bd-i.be
Technical contact name	Didier Lebout
E-Mail (technical)	Didier.lebout@bd-i.be
Tel (technical)	+32 473 915 207

1.4. Emergency telephone number

The permanently updated list and contact details of the National appointed bodies are publicly available at https://poisoncentres.echa.europa.eu/appointed-bodies.

The list of emergency telephone numbers here below is provided for reference only. They were checked at the date of the SDS publication. Please, consult with your local/national competent authorities to check the updated local emergency number in your country or region. All emergency bodies are all open 24/24h and 365 days/year except if differently indicated.
The general European urgency phone number is 112.

Country	Body name	City/adress	Phone number	Email adress	website
Austria	Vergiftungsinformationszentrale (VIZ)		+43 1 406 43 43	fgoe@goeg.at	https://goeg.at/Vergiftungsinformation/
Belgium	Antigif Center/ Centre Anti-poison		070 245 245 +322 264 96 30	medical.team@poisoncentre.be	https://www.poisoncentre.be/
Bulgaria	Токсикологични центрове		02 9154 411		https://pirogov.eu/bg
Croatia	Centar za kontrolu otrovanja		+385 1 2348 342		https://www.imi.hr/en/poison-control-centre/
Czech Republic	Toxikologice Informacni stredisko		224 91 92 93	tis@vfn.cz	https://www.tis-cz.cz/index.php/informace-o-stredisku/kontakty
Cyprus	Poison Control Center		1401		https://cyprus-mail.com/emergency-medical-services/
Denmark	Giftlinjen		82 12 12 12	giftlinjen@regionh.dk	https://www.bispebjerghospital.dk/giftlinjen/om-giftlinjen/Sider/default.aspx
Estonia	Terviseamet/ Mürgistusteabekeskus		(+372) 794 3794 16662		https://www.16662.ee/et
Finland	Hus/ Myrkytystietokeskus		0800 147 111 +358 9 471 977		https://www.hus.fi/potilaalle/sairaalat-ja-toimipisteet/myrkytystietokeskus
France	Centres anti-poison	Paris	+33 1 40 05 48 48	fw.toxicovigilance.lrb@aphp.fr	https://centres-antipoison.net/les-centres
France	Centres anti-poison	Angers	+33 2 41 48 21 21		
France	Centres anti-poison	Bordeaux	+33 5 56 96 40 80		
France	Centres anti-poison	Lille	+33 0800 59 59 59		
France	Centres anti-poison	Lyon	+33 4 72 11 69 11		
France	Centres anti-poison	Marseille	+33 4 91 75 25 25		
France	Centres anti-poison	Nancy	+33 3 83 22 50 50		
France	Centres anti-poison	Strasbourg	+33 3 88 37 37 37		
France	Centres anti-poison	Toulouse	+33 5 61 77 74 47		
FYROM	ЈЗУУ Клиника за токсикологија	ул.Водњанска 17, 1000 Скопје, Македонија	02 31 47 635	contact@toxicocenter.com.mk	www.toxicocenter.com.mk
Germany	Giftzentrale (Giftnotruf)	Hindenburgdamm 30 12203 Berlin	+49 30 19240		https://giftnotruf.charite.de/en/metas/contact_directions/
Germany	Giftzentrale (Giftnotruf)	Ismaningerstr. 22 81675 München	089 19240	tox@mri.tum.de	https://toxikologie.mri.tum.de/
Germany	Giftzentrale (Giftnotruf) "ELKI" (Eltern-Kind-Zentrum),	B 30.3, Venusberg-Campus 1, 53127 Bonn	228 19240		https://gizbonn.de/kontakt

Germany	Gemeinsames Giftinformationszentrum der Länder Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen	- Nordhäuser Straße 74 - 99089 Erfurt	0361 730 730		https://www.ggiz-erfurt.de/home.html
Germany	Vergiftungs-Informations-Zentrale Freiburg	Breisacher Straße 86 b 79110 Freiburg	0761 19240	giftinfo@uniklinik-freiburg.de	https://www.uniklinik-freiburg.de/giftberatung.html
Germany	Giftinformationszentrum-Nord (GIZ-Nord) der Länder Bremen, Hamburg, Niedersachsen und Schleswig-Holstein	Universitätsmedizin Göttingen | Georg-August-Universität Robert-Koch-Str. 40 | D-37075 Göttingen	0551 19240		https://www.giz-nord.de/php/
Germany	Giftzentrale (Giftnotruf)	Langenbeckstraße 1 Gebäude 601 55131 Mainz	06131 19240	mail@giftinfo.uni-mainz.de	https://www.unimedizin-mainz.de/giz/uebersicht.html
Hungary	Információszolgáltatás akut mérgezés eseté	1097 Budapest, Albert Flórián út 2-6.	(+36-80) 201-199	ettsz@nnk.gov.hu	
Ireland	National Poisons Information Centre,	Beaumont Hospital, Dublin 9, Ireland.	01 809 2526 (8am – 10pm)		https://poisons.ie/
Italy	Centro Antiveleni di Bergamo	Bergamo	+39 800 88 33 00		http://www.antiveleni.altervista.org
Italy	Centro Antiveleni di Firenze	Firenze	+39 55 794 78 19		
Italy	Centro Antiveleni di Milano	Milano	+39 2 661 01 029		https://www.centroantiveleni.org/
Italy	Centro Antiveleni di Pavia	Pavia	+39 382 244 44		
Italy	Centro Antiveleni di Napoli	Napoli	+39 81 747 28 70		
Italy	Centro Antiveleni di Verona	Verona	+39 800 011 858		
Italy	Centro Antiveleni di Foggia	Foggia	+39 881 732 326		
Italy	Centro Antiveleni di Roma	Roma	+39 6 685 93 726 +39 6 499 78 000 +39 6 305 43 43		
Kazakhstan	Republican Toxicology Center	City Emergency Medecine Hospital Tole-bi 93, 480083 Almaty	+73272 927 055 +73272 925 868 (emergency)	emedhosp@netmail.kz	
Latvia*	Saindēšanās informācijas centri		+371 670 00 610		https://www.aslimnica.lv/lv
Lithuania	Apsinuodijimų informacijos biuras		+ 370 5 236 20 52		http://www.apsinuodijau.lt
Luxemburg	Giftinformationszentrum		+49 800 255 00		http://www.poisoncentre.be
Luxemburg	Centre antipoison		+352 800 255 00		http://www.centreantipoisons.be
Malta*	Mater Dei Hospital	Mater Dei Hospital Msida, MSD 2090, Malta	+356 2545 6504	customercare.mdh@gov.mt	
Netherlands	Nationaal Vergiftigingen Informatie Centrum (NVIC)	Utrecht	088 755 8000	nvic@umcutrecht.nl	https://nvic.umcutrecht.nl/ https://www.vergiftigingen.info/
Norway	Giftinformasjonen		+47 22 59 13 00		https://helsenorge.no/Giftinformasjon
Poland	Pracownia Informacji Toksykologicznej i Analiz Laboratoryjnych	ul. Jakubowskiego 2 31-501 Kraków	+48 12 411 99 99	oit@cm-uj.krakow.pl	https://oit.cm.uj.edu.pl/dzialalnosc-uslugowa/
Poland		Gdansk	+48 58 682 04 04	pct@pctox.pl	http://www.pctox.pl/news.php
Poland		Poznań	+48 61 847 69 46		http://www.raszeja.poznan.pl/oddzialy/oddzialtoksykologiczny
Poland		Warszawa	+48 607 218 174		okzit@burdpi.pol.pl
Portugal	Centro de Informacao Antivenenos		+351 808 250 143		http://www.inem.pt
Romania	CNMRMC		+40 213 183 606		infotox@insp.gov.ro
Romania	Spitalul Clinic de Urgenta Bucuresti		+40 215 992 300 int. 291		
Romania	Spitalul Clinic Judetean de Urgenta Targu Mures		+40 265.212.111		secretariat@spitjudms.ro
Russia	Горячая линия Министерства здравоохранения		+7 495 628 4453;+7 495 627 2944		http://rospotrebnadzor.ru

Serbia	Nacionalni centar za kontrolu trovanja		+381 11 3608 440		http://www.vma.mod.gov.rs/
Slovakia	Narodne toxikologicke informačne centrum		+421 2 5477 4166		http://www.ntic.sk
Slovenia*	Sekcija za klinično toksikologijo – SZD Center za zastrupitve - Interna klinika Univerzitetni klinični center Ljubljana	Zaloška cesta 7 1000 Ljubljana	112		http://ktf.si/prva-pomoc/
Spain	Servicio de Informacion Toxicologica		+34 91 562 04 20	sit@mju.es	https://www.mjusticia.gob.es/es/ministerio/organismos-entidades/instituto-nacional/servicios/servicio-informacion
Sweden	Giftinformationscentralen		+46 10 456 6700		https://giftinformation.se
Switzerland	Giftinformationszentrum		145		http://toxinfo.ch
Switzerland	Centre antipoison		145		http://toxinfo.ch
Switzerland	Centro Antiveleni		145		http://toxinfo.ch
United Kingdom	NHS Helpline		111		http://www.nhs.uk/NHSEngland/AboutNHSservices/Emergencyandurgentcareservices/Pages/NHS-111.asp
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111		https://www.npis.org/
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111		https://www.npis.org/
United Kingdom	National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111		https://www.npis.org/
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188		https://www.npis.org/
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0344 892 0111		https://www.npis.org/
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111		https://www.npis.org/

2. SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified.

2.2. Label elements

2.2.1. Label elements according to Regulation (EC) No. 1272/2008 (CLP)

none

2.2.2. Label elements according to DSP/DPD (others)

none.

2.3. Other hazards

No significant health hazard in normal industrial use conditions.

Contact with melted/heated product may cause thermal burns.
Granulated polypropelene at temperature lower than 150 oC does not emitt 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 processing, when heating it up to 150 oC and over, the emission of volitale 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.

3. SECTION 3: Composition/information on ingredients

3.1. Substances

According to CLP Regulation the product is a mixture of Polypropylene and Additives.
This product is a synthetic polymer consisting of at least 99.5% polymerised propene and additives: antioxidants, anticorrosion additives, nucleating agents and other functional additives in total < 0.5%.
According to regulation No. 1272/2008: is not classified. The product does not contain impurities or additives that could affect product's labelling and classification according to Regulation (EC) No 67/548/EEC and Regulation (EC) No 1272/2008 (CLP) in the concentration ranges specified

Constituent(s)	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard pictogram(s) and Hazard statement(s)
Propene	>99.5 ≤100			01-2119447103-50-0364 (propene)	none

The substance is a solid and is not registered as a nanoform.

4. SECTION 4: First aid measures

4.1. Description of first aid measures

4.1.1. General first aid instruction according to exposure routes

In general 	Spontaneous penetration of granulated polypropylene into human organism is impossible. Product at normal conditions is stable and non-volatile. Warning before intervention: contact with hot oxidized product may cause severe thermal burns. Dust and/or thermal decomposition products inhalation may irritate respiratory system, eye irritation. If eye/skin contact with hot product occurs, obtain immediate medical attention
Inhalation	No hazard in normal use of product. Move any exposed person to fresh air at once. Keep warm and at rest. If there is respiratory distress give oxygen. If respiration stops or shows signs of failing, apply artificial respiration. Get medical attention. In case the molten substance vapours penetrate the respiratory airways, do the following: Immediately move an exposed person to fresh air at once. Keep warm and at rest. If there is respiratory distress give oxygen. If respiration stops or shows signs of failing, apply artificial respiration. Get medical attention. .
Skin Contact	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
Eye Contact	Rinse the eye immediately with plenty of water (low pressure) for at least 15 minutes. Remove contact lenses. Get medical attention.
Ingestion	If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel. May cause gastrointestinal blockage. Do not give laxatives unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person

4.1.2. Additional specific advises

none

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

Inhalation Symptoms: Dust and/or thermal decomposition products inhalation may irritate espiratory system, eye irritation.
Skin Contact Symptoms: Repeated and/or prolonged skin contact may cause irritation. Contact with hot product may cause serious burns.
Eye Contact Symptoms: Eye Contact may cause mechanical damage, irritation of eyes mucous. Contact with hot product may cause serious burns.
Ingestion/aspiration Symptoms: Ingestion/aspiration may cause irritation of digestive tract. May cause gastrointestinal blockage.

4.3. Indication of any immediate medical attention and special treatment

If necessary treat symptomatically.

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

5. SECTION 5: Firefighting 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 dust.

Unsuitable extinguishing media: Do not use water jets. Direct water jets on the burning product could cause a steam explosion and spread of the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the
Foam.

5.2. Special hazards arising from the substance or mixture

May be combustible at high temperature.
Combustion products: Carbon oxides (CO and CO2) and soot.
Combustion products may include thermo-oxidative degradation products: carbon oxides, formaldehyde, acetaltehyde, organic acids (acetic acid) and etc.
Combustion products may be toxic and/or irritating.
Polypropylene 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 low flammability limit for polypropylene dust is 32.7 g/m3.

5.3. Advice for firefighters

Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.
Protection during firefighting:
Wear full protective clothing and MSHA/NIOSH-approved self-contained breathing apparatus (SCBA) with full face piece operated in the pressure demand or other positive pressure mode.

5.4. Additional Information

none

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Take precautionary measures against static discharges.
Ensure adequate ventilation.
Avoid dust generation. Avoid inhalation of dusts.
Spilled material may cause a slipping hazard.
In case of insufficient ventilation, wear suitable respiratory equipment.
For additional information, refer to Section 8, Exposure Controls and Personal Protection equipment.

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 wastes are non-toxic and are not to be neutralized.

6.3. Methods and material for containment and cleaning 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

See Sections 13 and 8.

7. SECTION 7: Handling and storage

7.1. Precautions for safe handling

7.1.1. Advises for safe handling

Handle in accordance with good industrial hygiene and safety practice.
Avoid all sources of ignition.

Provide input-extract and local ventilation of work zones to ensure that the occupational exposure limit is not exceeded. In case of insufficient ventilation, wear suitable respiratory equipment (See Section: 8).
Regularly control work zone air.
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.
Dust can be ignited by static discharge. Pneumatic conveying and other mechanical handling operations can generate combustible dust. Do not permit dust to accumulate to reduce the potential for dust explosions.
Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation.
Do not swallow. Avoid contact with eyes. Avoid prolonged or repeated contact with skin.
Do not ingest or inhale combustion or decomposition products.
Workers should be protected from the possibility of contact with molten product.
Avoid contact with heat and ignition sources and oxidizing agents.
Warning: spilled granules will cause slipping and fall.

7.1.2. Advises for general occupational hygiene

Not to eat, drink and smoke in work areas.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Advises for storage

Store in accordance with good manufacturing practices.
Keep away from heat, sparks and flame. Protect from direct sunlight.
Store in a dry, well-ventilated area.
Keep away from sources of ignition - No smoking.

7.2.2. Storage requirements

- Storage Temperature: Ambient, not exceeding 30C, and at a humidity of 40-80%.
- Storage Life: 6 Month(s).

7.2.3. Incompatible materials

Incompatible with oxidizing agents. (strong) acids. halogens.

7.3. Specific end use(s)

Specific uses are described in section 1.2. No specific recommendation is required for any of the uses of the substances

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational Exposure limits

EU does not define an occupational exposure limit specifically for the substance according to CD 98/24/EC.

Country/area	Name CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (15 min, ppm)	STEL (15 min, mg/m³)	reference
none	Polypropylene					

	9003-07-0					

For Dust (inhalable, respirable)

Country/area	**Name CAS No.**	**LTEL (8 hr TWA ppm)**	**LTEL (8 hr TWA mg/m³)**	**STEL (15 min, ppm)**	**STEL (15 min, mg/m³)**	**reference**
USA	respirable		5			OSHA
Switzerland, Belgium, Spain.	Inhalable Respirable		10 3			https://limitvalue.ifa.dguv.de/
Denmark	Inhalable		10		20	https://limitvalue.ifa.dguv.de/
Finland	Inhalable (inorganic)		10			https://limitvalue.ifa.dguv.de/
France	Inhalable Respirable (insoluble)		7 3.5			https://limitvalue.ifa.dguv.de/
Sweden (inorganic)	Inhalable Respirable		5 2.5			https://limitvalue.ifa.dguv.de/
Austria	Inhalable Respirable		10 5		20 10	https://limitvalue.ifa.dguv.de/
Poland	Inhalable		10			https://limitvalue.ifa.dguv.de/
Hungary	Inhalable Respirable		10 6			https://limitvalue.ifa.dguv.de/
Germany (AGS)	Inhalable Respirable		10 1.25		20	https://limitvalue.ifa.dguv.de/
Germany (DFG)	Inhalable Respirable		4 0.3		 2.4	https://limitvalue.ifa.dguv.de/
Ireland	Inhalable Respirable		10 4			https://limitvalue.ifa.dguv.de/
Latvia	Polymer dust		5			https://limitvalue.ifa.dguv.de/

8.1.2. PNEC's and DNEL's

No DNEL or PNEC available for polypropylene.

8.2. Exposure controls

8.2.1. 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

General hygiene measures for the handling of chemicals are applicable.

8.2.2.1. Eye/face protection

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

8.2.2.2. Skin protection (Hand protection/ Other)

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

8.2.2.3. 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)

8.2.2.4. Thermal hazards

Not applicable.

8.2.3. 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

9. SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

9.1.1. Physical state

Solid (100%), at 20 C and atmospheric pressure

In form of granulates or briquettes

9.1.2. Colour

White or colourless, non-transparent

9.1.3. Odour

odourless

9.1.4. Melting point/freezing point

160-170 C @ 101.3 kPa.

9.1.5. Boiling point or initial boiling point and boiling range

Not available

9.1.6. Flammability

Don't ignite spontaneously.

Burn if exposed to a source of fire: ignition temperature 325-243 C .

9.1.7. Lower and upper explosion limit

Not relevant

9.1.8. Flash point

Not relevant.

9.1.9. Auto-ignition temperature

325-388 C at atmospheric pressure

9.1.10. Decomposition temperature

The substance is stable in standard conditions (not able to decompose) and not self-reactive. The substance does not contain any functional groups that dissociate.

9.1.11. pH

not relevant.

9.1.12. Kinematic viscosity

Data not available.

9.1.13. Solubility

Insufficiantly plumps at room temperature in organic solvents (acetone, benzene, toluene).

At 100 C, PP dissolves in toluene, benzene.

9.1.14. Partition coefficient n-octanol/water (log value)

Not available.

9.1.15. Vapour pressure

Not relevant

9.1.16. Density and/or relative density

Bulk specific density 440-520 kg/m3

Specific gravity: 0.91-0.97

9.1.17. Relative vapour density

Not relevant.

9.1.18. Particle characteristics

Granulometry 2-5 mmm.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

9.2.1.1. Flammability

The substance is not classified.
Low flammability limit for dust at 32.7 g/m3.

9.2.2. Other safety characteristics

None

10. 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 conditions. No decomposition if stored and applied as directed

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. 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 oxidizing agents.

10.6. Hazardous decomposition products

None under normal conditions at ambient temperatures.
Decomposition products can include trace amounts of formaldehyde, carbon oxide, acetaltehyde, organic acids (acetic acid), etc

11. SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1. Toxicocinetics, distribution

11.1.2. acute toxicity

Not classified.
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.

11.1.2.1. Oral route

Low oral toxicity. Polypropylene Homopolymer: LD50 (rat): >5000 mg/kg.

11.1.2.2. Inhalation route

Low acute toxicity. Dusts and vapours or fumes evolved during thermal processing may cause irritation to the respiratory system

11.1.3. skin corrosion/irritation

not classified. No evidence of irritant effects from normal handling and use. Skin contact with melted/heated product may cause serious thermal burns

11.1.4. serious eye damage/irritation

Dust may have irritant effect on eyes. Permanent damage is unlikely.

11.1.5. Respiratory irritation

Not classified.
Dust and/or thermal decomposition products inhalation may cause irritation of respiratory system.

11.1.6. respiratory or skin sensitisation

Not classified. No data available.

11.1.7. germ cell mutagenicity

Not classified. No data available.

11.1.8. Carcinogenicity

Not classified. No data available.

11.1.9. reproductive toxicity

Not classified. No data available..

11.1.10. STOT-repeated exposure

Not classified. No data available.

11.1.11. aspiration hazard

none expected

11.2. Information on other hazards

No relevant information available.

12. SECTION 12: Ecological information

12.1. Toxicity

At normal conditions polypropylene is a very stable product.

Product does not form toxic compounds with other substances in air and water.

The product is poorly biodegradable but does not pose a hazard to the environment.

Pollution of water ponds 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.

12.1.1. Aquatic compartment

Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life. No data available.

12.1.2. Soil compartment

No data available

12.2. Persistence and degradability

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, in regards to standard testing methodology.

The mechanical and chemical degration of polypropylene is recognized, e.a under UV influence, and the degradation mechanisms are generally described as a depolymerization initiated by the oxidation of impurities but it is insufficiently caraterized. The various degradation byproducts may include larger molecules, as well as microscale and nanoscale plastics with increased bioavailability and associated potential adverse impacts to ecosystems throughout the food web. Additional research is needed to better understand the mechanisms of polymer degradation under various environmental conditions.

12.2.1. Hydrolysis

No data available

12.2.2. Photolysis

No data is available.
Polypropylene can be sensitive to photodegradation at a very low rate, which is depending on environmental exposure (UV, water pH, microorganism, mechanical solicitation and abrasion). An available study synthesis suggests an half-life of 580 years in soil with UV exposure, and in the range 50-90 years in sea water.

12.2.3. Biodegradability in water

Insoluble and not biodegradable in water.

12.3. Bioaccumulative potential

Based on the available information, there is no indication of a bioaccumulation potential as the substance does not decompose, is biologically inert, and does not pass through the biological membranes and, hence, secondary poisoning is not considered relevant.
Due to mechanical fragmentation, micro or nano-particles of polypropylene can accumulate as an inert balast in water, soil and air,- and potentially in intestinal or respiratory track of animals-. Effects due to bioaccumulation are not known.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substance is not PbT or vPvB .

12.6. Endocrine disrupting properties

There is no evidence that this substance has potential endocrine disrupting properties

12.7. Other adverse effects

None anticipated.

13. SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal should be in accordance with local, state and national legislation.
Waste water containing polypropylene should be treated.
Packaging waste (paper bags) shall be collected and send for recycling. Plastic waste shall be removed to disposal.

13.2. Additional information

European Waste Code (2001/118/EC):
07 02 13 – waste plastic
20 01 39 – plastic

14. SECTION 14: Transport information

14.1. UN number or ID number

ADR/RID/IATA/IMDG : UN none

14.2. UN proper shipping name

Propylene

14.3. Transport hazard class(es)

No data available

14.4. Packing group

Not applicable

14.5. Environmental hazards

It is not dangerous for environment.
It is not a marine pollutant according to the IMDG Code and the Emergency Response Procedures for Ships Carrying Dangerous Goods.

14.6. Special precautions for user

none

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

15. SECTION 15: Regulatory information

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

15.1.1. EU regulations xx

Annex I of Regulation (EC) No. 689/2008 (Export and Import of Dangerous Chemicals)	Not listed.
Annex VI of Regulation (EC) No. 1272/2008 (CLP)	Not listed
Regulation (EC) No. 1907/2006 (REACH)	No. registration as polymer
Authorisations and/or restrictions on use	Not listed.
not on the REACH Candidate List	Not applicable
not on the REACH Annex XIV List	Not applicable
not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.	
not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants	
Plastic Food Contact Materials (FCMs) authorised for use in the European Union under Regulation 10/2011/EU. Pursuant to Art. 4(b) of Directive 282/2008/EC on recycled plastic FCMs.	

15.1.2. National regulations

None known.

15.2. Chemical safety assessment

Chemical Safety Assessment (CSA) is not required for the substance since it is not subject to registration as a polymer according to the provisions of Article 2(9) of REACH.

16. SECTION 16: Other information

This SDS version has been prepared on the 24th of August 2022

Legend of acronyms

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative
NOAEC	No Observed Adverse Effect Concentration.