Safety Data Sheet

according to Annex II to the REACH Regulation (EC) 1907/2006 as amended by Commission Regulation (EU) 2020/878

Revision date: 28.10.2026 | Supersedes version of 11.07.2024 | Revision number: 2.0

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

1.1. Product identifier

Trade name: Green Gran®; Green Gran® PLUS

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

Identified uses : SBR granulate derived from recycled tyres, raw material for further processing as part of the feedstock.
Uses advised against : uses other than those listed above.

1.3. Details of the supplier of the safety data sheet

Supplier: **Recykl Organizacja Odzysku S.A.**
Address: ul. Letnia 3, 63-100 Śrem, Poland
Phone: +48 61 281 06 11
E-mail: recykl@recykl.pl

1.4. Emergency telephone number

111 & 999 (general emergency numbers)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Product is not classified as hazardous according to Regulation (EC) No 1272/2008 [CLP].

Most significant adverse effects related to physicochemical properties

Product is not classified due to hazards related to physicochemical properties.

Most significant adverse effects to human health

Product is not classified due to hazards related to human life and health.

Most significant adverse effects to environment.

Product is not classified as hazardous to the environment.

2.2. Label elements

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

Hazard statements:
Not applicable.
Precautionary statements:
Not applicable.

2.3. Other hazards

Does not contain PBT and/or vPvB substances ≥ 0.1% evaluated according to REACH Annex XIII
The mixture does not meet the PBT and vPvB criteria according to Annex XIII of REACH.
As of the date of preparation of the safety data sheet, the product does not contain substances included in the Candidate List for inclusion in Annex XIV of REACH, established in accordance with Article 59(1) of Regulation (EC) 1907/2006 due to endocrine disrupting properties. No substance included in the product is a substance identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 (in a concentration equal to or greater than 0.1 percent by weight).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Vulcanised tyre rubber compound (including SBR, natural rubber (NR), butyl rubber (IIR), carbon black and mineral fillers) accounts for approximately 90–99% of the total weight of the product. Natural rubber (NR) accounts for approximately 28% of the total weight of the product. There may be isolated inclusions of fibres, metal and rubber of a different colour.

Content of individual polycyclic aromatic hydrocarbons (PAHs): benzo[a]pyrene, benzo[e]pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[j]fluoranthene, benzo[k]fluoranthene, dibenzo[a,h]anthracene ≤ 0.5 mg/kg relative to the weight of the PAH-containing material.

Does not contain components classified as hazardous in concentrations that would require their inclusion in the safety data sheet in accordance with the applicable regulations.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact: remove contaminated clothing. Rinse contaminated skin with plenty of water for several minutes. Contact a doctor if alarming symptoms occur.

In case of eye contact: protect non-irritated eye, remove contact lenses. Rinse contaminated eyes thoroughly with water for several minutes. Avoid strong water jets – risk of corneal damage. Contact a doctor if alarming symptoms occur.

In case of ingestion: do not induce vomiting. If the affected person is conscious, rinse their mouth with water. Never give anything by mouth to an unconscious person. If any alarming symptoms occur, contact a doctor.

Inhalation: under normal and foreseeable conditions of use, no adverse effects are expected from exposure via this route. If alarming symptoms occur, consult a doctor.

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

Skin contact: redness, itching, dry skin. Contact with hot molten product may cause thermal burns.

Eye contact: redness, mechanical irritation, a burning sensation, watery eyes, blurred vision. Contact with hot molten product may cause thermal burns.

Ingestion: abdominal pain, vomiting and diarrhoea may occur.

Inhalation: under normal working and usage conditions, no adverse effects are expected from exposure via this route. Exposure to high concentrations of dust may cause mechanical irritation of the respiratory tract, as well as coughing and temporary breathing difficulties.

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

Symptomatic treatment should be implemented. The decision on emergency treatment is made by a doctor or paramedic after a thorough assessment of the condition of the victim.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: extinguishing procedures should be adapted to the fire environment. To extinguish the fire, use foam, CO_2 or fire-extinguishing powders.

Unsuitable extinguishing media: avoid strong jets of water to prevent the spread of fire.

5.2. Special hazards arising from the substance or mixture

During combustion, rubber produces thick black smoke and toxic gases (CO, SOx, NOx, ZnO) as well as other unidentified products of thermal decomposition and combustion. The substances produced during a fire may pose a health hazard; therefore, inhalation should be avoided.

5.3. Advice for firefighters

Use full protective equipment, including respirators with face shield (EN 137), safety shoes (EN 659), helmets (EN 443) and protective clothing (EN 469). Do not undertake any firefighting activities without proper preparation and training. Extinguish the fire from a safe distance. Avoid the release of used extinguishing agents into the environment, sewers and water bodies. Collect used extinguishing agents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate personal protective equipment. Avoid contamination of skin and eyes. Avoid generation and inhalation of dusts of the product. Ensure adequate ventilation of the premises to be cleaned. Clean-up should only be carried out by trained and appropriately equipped personnel. Bystanders should have limited access to the area where the product has been released during clean-up operations.

6.2. Environmental precautions

Prevent the release of the product into the environment, soil, sewage, groundwater and surface waters. In the event of a large release into the environment, it is imperative that the relevant services are notified.

6.3. Methods and material for containment and cleaning up

In the case of small releases, collect the material mechanically, avoiding dust formation (e.g. using a vacuum cleaner equipped with a HEPA filter) and place it in labelled containers intended for waste disposal or transfer it for further use. In the case of large releases, notify the relevant services and secure the release site.

6.4. Reference to other sections

Handling of product waste – section 13 of the safety data sheet.
Personal protective equipment – section 8 of the safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking and the use of electronic cigarettes is prohibited. Do not eat or drink while working with the product. Observe health and safety rules. Avoid contamination of eyes and skin. Avoid generation and inhalation of product dusts. Always wash hands thoroughly after any contact with the product, after finishing working with the product and before taking a break. Do not take contaminated clothing outside the workplace. Ensure proper ventilation of workplaces.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated place. Avoid contact with food and animal feed. Keep away from open flames and sources of heat. Do not store with incompatible materials. Store in closed, labelled containers. Protect from wind and precipitation. If stored outdoors, use protective measures to limit the spread of the material.

7.3. Specific end use(s)

SBR granulate derived from recycled tyres, raw material for further processing as part of the feedstock.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

The product does not contain substances in concentrations at which monitoring of occupational exposure limits (OELs) would be expected to be required; however, it may be necessary to monitor dust concentrations. The measurement procedures used should be in accordance with the relevant national or European standards, taking into account the conditions at the workplace and the relevant measurement methodology. The mode, type and frequency of testing must meet the requirements set forth in the relevant regulation. (Chemical Agents Code of Practice 2024)

8.2. Exposure controls

Appropriate engineering controls

Work in accordance with health and safety rules. Do not eat, drink or smoke during work, do not use electronic cigarettes. Ensure adequate general ventilation of the rooms where the work with the product takes place. Ensure that exposure to dust is kept below the maximum permissible concentrations in the workplace.

Personal protective equipment:

Use the recommended personal protective equipment. Individual protective equipment should be selected in accordance with CEN standards and in consultation with the protective equipment supplier. When selecting personal protective equipment, the type of task to be performed and the duration of exposure should be taken into account.

Eye protection:

Not required under normal working conditions. If the risk assessment indicates it to be required, wear chemical-resistant goggles or safety glasses. ISO 16321-1

Skin and body protection:

Provide skin protection adapted to the conditions of use and exposure.

Hand protection:

When working with large quantities of the product, wear protective gloves resistant to the product (in accordance with European standard ISO 374-1 or equivalent). Follow the instructions regarding permeability and breakthrough time provided by the glove manufacturer. The type and thickness of the material should be selected for the specific workplace, as the choice of gloves may also depend on other substances and exposure factors present at the workplace.

In the event of prolonged contact, use protective gloves with an effectiveness level of 6 (breakthrough time > 480 min.). Recommended material: rubber or neoprene, minimum thickness 0.4 mm. The thickness of the material should be selected based on data provided by the glove supplier.

When selecting specific gloves for a particular application and duration of use in the workplace, other workplace-related factors should also be taken into account, such as (but not limited to): other chemicals that may be used, physical requirements (protection against cuts/punctures, thermal protection) and the glove supplier's instructions/specifications.

Respiratory protection:

Not required under normal working conditions. In case of inadequate ventilation, or where indicated by a risk assessment, wear a suitable respirator.

Environmental exposure controls:

Avoid release to the environment. Prevent from entering the sewage system and groundwater and surface water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	**:**	Solid (granulate)
Colour	:	Black
Odour	:	Characteristic of tyre rubber
Odour threshold	:	Not determined
Melting point	:	Not determined
Freezing point	:	Not determined
Boiling point	:	Not determined
Flammability	:	Not determined
Lower explosion limit	:	Not determined
Upper explosion limit	:	Not determined
Flash point	:	Not applicable, solid
Auto-ignition temperature	:	Not determined
Decomposition temperature	:	Not determined
pH	:	Not applicable
Kinematic viscosity	:	Not determined
Solubility	:	Insoluble in water
Partition coefficient n-octanol/water (Log Kow)	:	Not determined
Vapour pressure	:	Not determined
Vapour pressure at 50 °C	:	Not determined
Density	:	Not determined
Relative density	:	Not determined
Relative vapour density at 20°C	:	Not determined

Particle characteristics	:	Group 1 - granulate with a particle size from 0.8 mm to 10 mm and powders below 0.8 mm. Group 2 - granulate with a particle size from 10 mm to 20 mm (classification into groups according to PN-EN 14243-2:2019-04) Other fractions may occur in the case of granulates of individually specified size, in accordance with the customer's request.

9.2. Other information

Bulk density: 380-600 kg/m^3
Volume density: 1100-1250 kg/m^3

SECTION 10: Stability and reactivity

10.1. Reactivity

Under normal conditions of work and use, the product is not reactive.

10.2. Chemical stability

Under normal ambient conditions during storage and use, the product is stable.

10.3. Possibility of hazardous reactions

Dangerous polymerization does not occur.

10.4. Conditions to avoid

Store away from heat sources, hot surfaces and direct sunlight. Do not heat.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidising agents, strong reducing agents.

10.6. Hazardous decomposition products

Carbon oxides.

SECTION 11: Toxicological information

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

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.

Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity – single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity – repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Information on likely routes of exposure	**Skin contact:** redness, itching, dry skin. **Eye contact:** redness, mechanical irritation, a burning sensation, watery eyes, blurred vision. **Ingestion:** abdominal pain, vomiting and diarrhoea may occur. **Inhalation:** under normal working and usage conditions, no adverse effects are expected from exposure via this route. Exposure to high concentrations of dust may cause mechanical irritation of the respiratory tract, as well as coughing and temporary breathing difficulties.
Symptoms related to the physical, chemical and toxicological characteristics	No test data available for the mixture. There is no additional information collected based on actual exposure to the product.
Delayed and immediate effects as well as chronic effects from short and long-term exposure	No test data available for the mixture. There is no additional information collected based on actual exposure to the product.

11.2. Information on other hazards

Endocrine disrupting properties

As of the date of preparation of the safety data sheet, the product does not contain substances included in the Candidate List for inclusion in Annex XIV of REACH, established in accordance with Article 59(1) of Regulation (EC) 1907/2006 due to endocrine disrupting properties. No substance included in the product is a substance identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 (in a concentration equal to or greater than 0.1 percent by weight).

Other information

No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Mixture toxicity	Product is not classified as hazardous to the environment.

12.2. Persistence and degradability

No additional data available for the mixture.

12.3. Bioaccumulative potential

No additional data available for the mixture.

12.4. Mobility in soil

No additional data available for the mixture.

12.5. Results of PBT and vPvB assessment

Does not contain PBT and/or vPvB substances ≥ 0.1% evaluated according to REACH Annex XIII
The mixture does not meet the PBT and vPvB criteria according to Annex XIII of REACH.

12.6. Endocrine disrupting properties

As of the date of preparation of the safety data sheet, the product does not contain substances included in the Candidate List for inclusion in Annex XIV of REACH, established in accordance with Article 59(1) of Regulation (EC) 1907/2006 due to endocrine disrupting properties. No substance included in the product is a substance identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 (in a concentration equal to or greater than 0.1 percent by weight).

12.7. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendations for product disposal

Disposal must be carried out using the appropriate EWC code, in accordance with applicable regulations. The waste code must be assigned at the point of generation based on the application in which the mixture is used.

Recommendations for packaging disposal

Recover and recycle packaging waste safely in accordance with local/national regulations. Only packaging that is completely empty can be sent for recycling.

Information on environmental waste

Avoid release to the environment.

EU Regulations: Directive 2008/98/EC as amended, Directive 94/62/EC as amended

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number
Not applicable, the product is not classified as dangerous for transport.
14.2. UN proper shipping name
Not applicable.
14.3. Transport hazard class(es)
Not applicable.
14.4. Packing group
Not applicable.
14.5. Environmental hazards
Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

EU-Regulations

EU restriction list (REACH Annex XVII)

Granulates classified in Group 1 (particle size from 0.8 to 10 mm) may meet the conditions of the restriction under entry 78 of Annex XVII.
The supplied granulates classified in Group 1 (particle size from 0.8 to 10 mm) may contain synthetic polymer microparticles that meet the conditions set out in entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

Vulcanised tyre rubber compound (including SBR, natural rubber (NR), butyl rubber (IIR), carbon black and mineral fillers) accounts for approximately 90–99% of the total weight of the product. Natural rubber (NR) accounts for approximately 28% of the total weight of the product. There may be isolated inclusions of fibres, metal and rubber of a different colour.

Textile fraction

Polyester polymers – 80.2% on average.

Polyamide polymers – 14.5% on average.

Polypropylene polymers – 5.3% on average.

REACH Annex XIV (Authorisation List)

The product does not contain any substances listed in Annex XIV to the REACH Regulation in concentrations of ≥ 0.1%.

REACH Candidate List (SVHC)

The product does not contain any substances on the REACH Candidate List (SVHC) in concentrations of ≥ 0.1%.

PIC Regulation (EU 649/2012, Prior Informed Consent)

The product does not contain substances listed on the PIC list (EU Regulation 649/2012 on the export and import of dangerous chemicals).

POP Regulation (EU 2019/1021, Persistent Organic Pollutants)

The product does not contain substances listed on the POP list (EU Regulation 2019/1021 on persistent organic pollutants).

Ozone Regulation (EU 2024/590)

Does not contain substances listed for ozone destruction (EU Regulation 2024/590 on substances that deplete the ozone layer).

Guidance on reducing emissions of synthetic polymer microparticles (SPM)

Obligations of the industrial user

The user is obliged to prevent the release of SPM into the environment, to use the product in accordance with its intended purpose, to implement appropriate technical and organisational measures, and to ensure the traceability of the product's use.

Record-keeping and reporting

The user should keep records of the quantity of product purchased, the quantity used in manufacturing processes, the quantity of waste and residues, and losses resulting from spillage or transport. These data should be stored in a manner that allows them to be used for reporting purposes (e.g. reporting via ECHA systems).

Safety guidelines

Receipt and unloading

Carry out unloading on a hard, impermeable surface. Avoid spilling the material, particularly in open areas. Use closed packaging (big bags, sacks).

Storage

Store in closed, labelled containers. Protect from wind and precipitation. If stored outdoors, use protective measures to limit the spread of the material. In the event of a spill: collect mechanically.

Internal transport

Use mechanical transport (e.g. conveyors, loaders). Minimise material loss during handling. Avoid pouring from a height.

Use in industrial processes

Use the product under controlled process conditions. Minimise the dispersal of material in the working environment. For applications in open areas (e.g. construction, surfacing) – take measures to prevent granules from spreading beyond the application area.

Cleaning

Use mechanical methods (sweeping, collection). Use industrial vacuum cleaners if necessary. Do not flush with water into the drains.

Waste and residues

Direct product residues for reuse, recycling or recovery. Do not allow them to enter the sewerage system or the aquatic environment.

Personal protective equipment

It is recommended to use protective gloves, work clothing and dust masks (in the presence of fine fractions).

Training

The user should provide training on the safe handling of the product, the prevention of SPM emissions, and operational and emergency procedures relating to the product.

Response in the event of a release

Secure the incident site. Stop further spillage. Collect the material mechanically. Do not flush with water.

15.2. Chemical safety assessment

A chemical safety assessment was not conducted for the mixture.

SECTION 16: Other information

Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived No-Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European Waste Catalogue
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal Protective Equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Changes compared to the previous version:
Sections 1-16

Sources of data used to develop the safety data sheet:

ECHA (European Chemicals Agency) databases.
Safety data sheets of raw material suppliers.
Publicly available toxicological databases.
Regulation (EC) No 1272/2008 and all its amendments.

Training:

It is recommended that the user receive appropriate job training, as well as occupational health and safety training, before working with the product.

The data contained in the safety data sheet is based on current information from publicly available sources. The content of the safety data sheet is intended solely for the purpose of protecting health and life, ensuring the safety of people and the environment. Safety data sheet is not a guarantee of product properties. The safety data sheet does not release the user from the obligation of proper and safe handling of the product in accordance with the manufacturer's instructions.