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MATERIAL SAFETY DATA SHEET

according to Regulation EC 1907/2006 (REACH), Regulation EC 1272/2008 (CLP) and Commission Regulation EU 2015/830
Product name: Regranulated PET
Date of compilation: 25.05.2023
Date of revision: 31.1.2025
Revision: 1.21

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

1.1. Product identifier

Name: Regranulated PET
Other identification: Not stated
REACH registration number: not allocated, the product is a mixture, not a substance

1.2. Relevant identified uses of the substance and mix and uses advised against

Recommended use: Material used to make PET bottles
Uses advised against: not stated

1.3. Details of the supplier of the safety data sheet

Distributor: (Entity responsible for distribution in the Czech Republic)
rPET In Waste s.r.o .,
Company Registration Number: 03212025,
Registered seat: Cukrovar 1705, 665 01 Rosice Czech republic
Qualified person responsible for Safety Data Sheet compilation: Ing. Michal Nováček

1.4. Emergency phone number:

Toxicology Information Centre, Na Bojišti 1, Prague (non-stop):
+420-224919293 / +420- 224915402.
Information on health risks only – acute poisoning of people and animals

2. HAZARD IDENTIFICATION

Overall classification of the mixture: not classified as dangerous according to Regulation 1272/2008/ES (CLP); it does not contain dangerous substances / substances with exposure limits in the Community working environment / persistent, bioaccumulative and toxic substances or highly persistent and bioaccumulative substances.
A MSDS is not required for this substance, but this MSDS serves to ensure the transfer of information about safety during work, storage, transport or other handling.

Human health hazards:
The mixture is not classified as hazardous for human health. Normal usage does not cause any undesirable health effects, the mixture is biologically practically inert. Use of a small volume should not cause any problems. Contact of the molten product with skin, eyes or mucous membranes may cause serious burns. Inhalation of dust generated during mechanical processing of the product or potential decomposition products from the molten / heated product in higher concentrations may cause temporary irritation of the respiratory tract and mucous membranes.

Environmental hazards:
The mixture is not classified as dangerous for the environment. Normal use does not have undesirable effects on the environment; the mixture is practically inert in the environment. Prone to very slow biodegradation / degradation caused by UV radiation.

2.1. Classification of the Substance or Mixture:

Classification according to Regulation 1272/2008/EC: the mixture is not classified as dangerous

2.2. Label Elements

Content:	not required
Hazard pictogram:	not required
Signal word:	not required
Standard hazard statements (H-statements):	not required
Additional hazards information:	not required
Additional data on the label for some mixtures:	not required
Precautionary statements (P-statements):	not required
Other obligatory labelling:	not required

2.3. Other hazards

Contents of PBT and vPvB substances: the mixture is not subject to criteria for PBT or vPvB substances in accordance with Annex XIII to Regulation EU No. 1907/2006, none of the ingredients in a quantity ≥ 0,1 % are included in the Candidate List (SVHC).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixture of modified polyethylene terephtalate (PET).

3.1. Substances not applicable

3.2. Mixtures

The mixture does not contain dangerous substances / substances subject to exposure limits in the Community working environment / persistent, bioaccumulative and toxic substances or highly persistent and highly bioaccumulative substances in a quantity higher than required for listing in the MSDS.
Other components, unclassified as dangerous / substances without exposure limits in the Community working environment / substances not considered as persistent, bioaccumulative and toxic substances or highly persistent and highly bioaccumulative.

4. FIRST AID MEASURES

4.1. Description of first aid measures

Observe all precautions on the label. If used in the usual way, no adverse effects on human health are expected. If any health problems occur or in case of doubt, seek medical advice and provide the physician with information from this Material Safety Data Sheet. If unconscious, put the victim in a recovery position and monitor breathing. Never administer any liquids orally to unconscious persons.
Be cautious when working with the molten product – risk of serious skin burns.

If inhaled: No adverse effects on health are expected during normal use. Direct inhalation exposure is not assumed due to the physical state. Inhalation of dust generated during mechanical processing of the product or potential decomposition products from the molten / heated product in higher concentrations may cause temporary irritation of the respiratory tract and mucous membranes. If the victim has problems, move them out of the reach of the product. The intervening person must also heed own safety. If respiratory irritation, drowsiness, nausea or unconsciousness occur after aerosol inhalation, seek medical aid immediately. In case of respiratory arrest, use a mechanical breathing apparatus or mouth-to-mouth resuscitation. Get immediate medical attention.

Skin contact: No health hazards are expected during normal use – No special precautions are necessary. Upon contact with the molten product, act according to the standard procedure for treatment of burns – cool the afflicted spot for several minutes with cold water. Do not forcefully remove the product that is stuck to the skin. If problems persist, seek medical attention.

Contact with the eyes: No health hazards are expected during normal use –

No special precautions are necessary. Dust generated during mechanical processing or decomposition products from the molten / overheated product may temporarily irritate the eyes. If problems persist, seek medical attention. Serious eye damage may occur upon eye contact with the molten product, act according to the standard procedure for treatment of burns – cool the afflicted spot for several minutes with cold water. Do not forcefully remove the product that is stuck to the skin. Seek medical attention immediately.

Ingestion: No health hazards are expected during normal use – No special precautions are necessary. This exposure mechanism is improbable.

4.2. Major acute and delayed symptoms and effects

The mixture is not classified as hazardous for human health. Normal usage does not cause any undesirable health effects, the mixture is biologically practically inert. Use of a small volume should not cause any problems. Contact of the molten product with skin, eyes or mucous membranes may cause serious burns. Inhalation of dust generated during mechanical processing of the product or potential decomposition products from the molten / heated product in higher concentrations may cause temporary irritation of the respiratory tract and mucous membranes.

4.3. Instructions for immediate medical attention and special treatment

No specific therapy known. Use supportive and symptomatic treatment.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: intermittent water spray, alcohol-resistant foam, dry extinguishing media, carbon dioxide (CO2) or other fire-extinguishing gases. Unsuitable extinguishing media: avoid a full water jet, it can contribute to spread of the fire.

5.2. Specific hazards of the substance or mixture

Flammable. In case of fire, decomposition at high temperatures or imperfect combustion may generate irritant or harmful gases/vapours/smoke (carbon monoxide, aldehydes, soot, other organic decomposition products). Do not inhale smoke / decomposition products.

5.3. Advice for firefighters

Firefighting measures: Evacuate the endangered area, prevent access of unauthorised persons. Approach the fire cautiously and keep a safe distance, if possible, downwind. Use intermittent water spray / water mist to cool the surface exposed to the fire also to protect the workers until the fire is extinguished and prevent the risk of the fire breaking out again. If possible, quickly remove containers from the space heated by the fire. If

possible, prevent the effluents from fire equipment or contaminated fire water from entering watercourses, drains or drinking water reservoirs. Fire residues and contaminated fire water must be disposed of in accordance with applicable local rules and regulations.

Special protective equipment for firefighters: Firefighters must always wear standard protective equipment (fire suit, helmet, gloves, footwear) and use self-contained breathing apparatus - possible formation of toxic, irritant, and flammable decomposition products. Avoid contact with the material during fire intervention. If contact is probable, use a full-body chemically resistant fire suit and self-contained breathing apparatus. Information about the protective suit after completion of the fire intervention or for disposal of material apart from the fire emergency is available in Sections 6 and 8.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions protective equipment and emergency procedures

No special precautions are necessary. Observe legislation on personal protection and occupational safety. Order unprotected persons out of the accident site. Put on appropriate personal protective equipment according to Section 8. Other precautions may be required depending on specific circumstances and/or the expert opinion of emergency response officers.

6.2. Environmental precautions

No special precautions are necessary.

6.3. Methods and materials for containment and cleaning up

Mechanically collect and place the materials into an appropriate container for safe disposal. Containers must be labelled. Dispose of the collected material in compliance with local rules and regulations (see Section 13).
Wash the contaminated surface with plenty of water.

6.4. Reference to other sections

Observe the instructions given in Sections 8 and 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Observe the usual hygiene measures for work with chemical substances and mixtures: wash your hands after work, do not eat, drink and smoke during work. Avoid contact with the eyes and mucous membranes as well as prolonged contact of the mixture with

the skin. During long working periods (for instance, packing) or day-long work, wear personal protective equipment, see Section 8. Never inhale the decomposition products or dust generated during mechanical processing. Ensure suitable ventilation and air extraction when working indoors. During heat treatment of the material, a small quantity of volatile organic compounds may be released. Ensure local extraction of such emissions. Observe all fire measures - do not use an open flame, remove all potential ignition sources, do not smoke.
Mechanically released dust is a potential risk of explosion and must be removed continuously. All equipment have to be earthed properly.

7.2. Conditions for safe storage of the substances and mixtures, including any incompatible substances and mixtures

Store in a dry and cool place protected against weather with adequate ventilation. Avoid direct sunlight, sources of heat and ignition.

7.3. Specific end uses

Material used to make PET bottles

8. EXPOSURE CONTROLS/PERSONAL PROTECTION EQUIPMENT

8.1. Control parameters

Exposure limits pursuant to Government Regulation No. 361/2007 Coll.:

-Glycol-modified polyethylene terephtalate (PET-G):	None
-Derived No Effect Level (DNEL):	Unspecified
-Predicted No Effect Concentration (PNEC):	Unspecified

8.2. Exposure controls

Take usual occupational health protection measures according to Czech Regulation 361/2007 Coll. Observe good personal hygiene principles, such as washing after handling material, before eating, drinking or smoking. Have the working clothing and protective equipment cleaned regularly. Discard contaminated clothing and footwear which cannot be cleaned. Keep the work-site tidy. Selection of personal protective equipment depends on the conditions of potential exposure, on the use, way of handling, concentration, and ventilation. Information below for the selection of protective equipment to be used with this material is based on its normal use.
Appropriate engineering controls: No specific requirements are necessary. Individual protection measures including personal protective equipment:

a) Face and eye protection:

Not necessary during normal use. Prevent contact with the eyes. If specific handling poses the risk of eye contact, use suitable tight protective glasses with side shields or a full-face shield (EN 166).

b) Skin protection:

Not necessary during normal use. Use thermally insulated gloves made of carbon fabric with protective features up to 300°C to handle hot / molten material as well as wrist protection.

Example of recommended gloves: KCL Karbo TECT with leather gauntlets to protect the wrists and thermal insulation up to 350°C.

Note: The suitability of gloves and the breakthrough time will differ with respect to specific conditions of use. For exact information on glove selection and breakthrough times for your specific conditions of use please contact the glove manufacturer. When choosing specific suitable gloves for the relevant use and exposure duration, consider all factors of the working environment, such as other chemicals used, physical factors (possible cutting, tearing, thermal resistance), as well as the respective manufacturer's specifications and recommendations. Damaged gloves must be replaced immediately.

c) Protection of the respiratory tract:

Not required for normal (routine) use. Ensure adequate ventilation or air extraction from the work site. Do not inhale decomposition products from the overheated material or dust from its mechanical processing. An approved respirator should be worn if mechanical measures fail to lower the required airborne contaminant level below the occupational exposure limit. Respirator selection, use, and maintenance must be in accordance with regulatory requirements. In the event of excessive generation of aerosols and overrun of prescribed exposure limits, use self-contained breathing apparatus or a particulate filter (type P1 or FFP1) according to ČSN EN 14387:2004 (83 2220) / EN 141. Detailed recommendations for the choice of a mask are contained in CSN EN 136, 140 and 405 and for the choice of a filter in EN 149 and 143 (EN 14387+A1). Remember that the life of the filter is limited – observe the manufacturer´s recommendations. In case of high concentrations in the air, use approved self-contained breathing apparatus with a positive pressure oxygen supply (ČSN EN 137). If an adequate volume of oxygen is not available, the gas/vapour detection system has malfunctioned or the filter's air-cleaning capacity/scope has been exceeded, it is suitable to use a respirator with an oxygen supply and an emergency bottle.

d) Thermal hazards: None in normal use.

e) Environmental exposure controls:

Not necessary under normal use. Ensure that the packaging is tight during storage and handling – prevent spills to the environment. Equip the storage and handling areas with sanitation equipment. Observe routine environmental protection measures, see Sections 6.2 and 12.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Property value method / conditions	
appearance:	solid granulate at 20°C
colour:	grey, blue, white, green
odour:	odourless
odour threshold:	unspecified
pH:	unspecified
melting point / solidification point:	254°C
initial boiling point / boiling range:	350°C
flash point (°C):	unspecified
evaporation rate?	unspecified
flammability (solids, gases):	unspecified
explosion or flammability limits:	unspecified
vapour pressure:	unspecified
vapour density:	unspecified
relative density:	1.38 g/cm3 ISO 1183/B
solubility:	insoluble in water soluble in a mixture of phenol trichloroethane, 20°C
self-ignition temperature:	N/A
decomposition temperature:	420°C
viscosity:	unspecified
explosive properties:	the mixture has no explosive properties
oxidising properties:	the mixture has no oxidising properties

9.2. Additional information

Vicat softening temperature (VST):	67°C
Heat deflection temperature (HDT):	70°C

10. CONSTANCY AND REACTIVITY

10.1. Reactivity

The mixture is not reactive under normal conditions of use and storage.

10.2. Chemical stability

The mixture is chemically stable under normal conditions of use and storage.
Overheating of the mixture may cause decomposition.

10.3. Possibility of hazardous reactions

No dangerous reactions are known.

10.4. Conditions to avoid

Unknown.

10.5. Incompatible materials

Unknown.

10.6. Hazardous decomposition products

If used in the usual way, no hazardous decomposition products are formed. In case of fire, decomposition at high temperatures or imperfect combustion may generate irritant or harmful gases/vapours/smoke (carbon monoxide, aldehydes, soot, other organic decomposition products).

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No adverse effects on human health are expected during normal use. The mixture is practically biological inert.

a) Acute toxicity

Based on available data, the classification criteria are not met. Not experimentally established for the mixture. Based on the composition, calculation method for classification and properties of the components, low acute toxicity is expected and no undesirable effects on human health are expected in the case of the applicable exposure methods.

b) Skin causticity/irritation

Based on available data, the classification criteria are not met. The mixture does not have direct corrosive / irritant effects on the skin. The molten product can cause severe burns.

c) Severe eye damage/irritation

Based on available data, the classification criteria are not met. The mixture does not have direct corrosive / irritant effects on the skin. The molten product can cause severe burns.

d) Respiratory/skin sensitisation

Based on available data, the classification criteria are not met. The ingredients have no sensitising potential.

e) Germ cell mutagenicity

Based on available data, the classification criteria are not met. The ingredients of the mixture have no mutagenic effect.

f) Carcinogenicity

Based on available data, the classification criteria are not met. The ingredients of the mixture do not have any carcinogenic effect.

g) Toxicity for reproduction

Based on available data, the classification criteria are not met. The ingredients of the mixture have no toxicity for reproduction potential.

h) Specific target organ toxicity - one-off exposure

Based on available data, the classification criteria are not met. Inhalation of dust generated during mechanical processing of the product or potential decomposition products from the molten / heated product in higher concentrations may cause temporary irritation of the respiratory tract and mucous membranes. However, these effects are not a reason for classification.

i) Specific target organ toxicity – recurrent exposure

Based on available data, the classification criteria are not met.

j) Inhalation hazard

Based on available data, the classification criteria are not met.

12. ENVIRONMENTAL INFORMATION

The mixture is not classified as dangerous for the environment. If used in the usual way, no adverse effects on the environment are expected. The mixture is practically biologically inert.

12.1. Toxicity

Not experimentally established for the mixture. Based on the composition and classification calculation method, the mixture is not classified as hazardous for the environment.

12.2. Persistence and degradability

Not experimentally established for the mixture. Due to its content, the mixture is practically inert in the environment and has very slow degradation.

12.3. Bioaccumulative potential

No experimental information is available. Based on its content, no bioaccumulative potential is expected.

12.4. Mobility in soil

Information not available. Insoluble in water. Contamination of ground water is not expected in the event of leakage into the soil.

12.5. Results of PBT and vPvB assessment

The mixture is not subject to criteria for PBT or vPvB substances in accordance with Annex XIII to Regulation EU No. 1907/2006, none of the ingredients in a quantity ≥ 0,1 % are included in the Candidate List (SVHC).

12.6. Other adverse effects

Unknown.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Must be surrendered to a licensed waste processing company or an authorised waste collection facility. Disposal must comply with all the requirements of applicable European and local waste legislation.

13.2. Disposal methods for the substance or mixture

Large volumes should be disposed of in a certified waste collection facility. As specified in the European Waste Catalogue, the classification of waste type refers to the particular use, not the product. Therefore, waste must be classified by the end user based on its particular use.

Proposed waste classification based on expected use:

07 02 WASTES FROM PRODUCTION, PROCESSING, DISTRIBUTION AND USE OF PLASTICS, SYNTHETIC RUBBER AND MAN-MADE FIBRES

Waste type: Plastic waste
Waste catalogue code: 07 02 13
Dangerous waste: no (Category O)

Disposal methods for contaminated packaging: Recycling is possible after thorough emptying and, where necessary, rinsing with water.

Proposed waste classification based on expected use:

15 01 PACKAGING MATERIALS (INCLUDING SEPARATELY COLLECTED MUNICIPAL PACKAGING WASTE)

Waste type: Paper and cardboard packaging / Plastic packaging
Waste catalogue code: 15 01 01 / 15 01 02
Dangerous waste: no (Category O)

14. TRANSPORT INFORMATION

The mixture is **not** classified as hazardous for transport according to ADR / RID / IMDG / ICAO / IATA.

- UN number:
- UN proper shipping name
- Transport hazard class(es)
- Packing group
- Environmental hazards: no

- Special precautions for the user: not applicable
- Transport in bulk according to Annex II of MARPOL and the IBC Code**:** not applicable

15. REGULATORY INFORMATION

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

Legislation:

- Act No. 350/2011 Coll., on chemical substances and chemical mixtures and on the amendment to some acts (Chemicals Act).
- 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, establishing a European Chemicals Agency
- Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures
- Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work
- Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC
- Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
- Commission Directive (EU) 2017/164 of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values according to Council Directive 98/24/EC amending Commission Directive 91/322/EEC, 2000/39/EC and 2009/161/EU
- European Waste Catalogue
- Decree of the Ministry of the Environment No. 93/2016 Coll. on the Waste Catalogue
- Czech Act No. 541/2020 Coll., on wastes, as amended and its implementing regulations
- Czech Act No. 309/2006 Coll., stipulating further requirements for health and safety at work in labour relations and concerning occupational health and safety protection in activities or services provided outside labour relations
- Czech Government Regulation No. 361/2007 Coll., laying down conditions for occupational health protection.

- Czech Act 309/2001 Coll., laying down conditions for health protection of employees at work, as amended
- Czech Decree No. 432/2003 Coll., laying down conditions for assigning categories to individual jobs, limiting levels for biological test indicators.
- Government Order No. 101/2005 Coll., on detailed requirements for workplaces and working environment
- Czech Act No. 201/2012 Coll., on air protection, as amended, and its implementing regulations
- Czech Act No. 477/2001 Coll., on packaging, as amended, and its implementing regulations and following related Acts
- Regulation of the European Parliament and of the Council (EC) No. 648/2004 of 31 March 2004 on detergents RESTRICTION OF PRODUCTION, PLACEMENT ON THE MARKET AND USE OF SOME HAZARDOUS SUBSTANCES, MIXTURES AND ITEMS

The mixture contains the following substances with limitation of production, placement on the market and use of some hazardous substances, mixtures and items according to Regulation 1907/2006/EC, Chapter VIII: none

15.2. Chemical safety assessment

Has not been carried out yet.

16. ADDITIONAL INFORMATION

a) Changes made in the safety data sheet within revision:

Not applicable, first issue - version 1.0.

b) Key or legend to abbreviations and acronyms:

Exp. lim.	Exposure limit
PEL	Permissible exposure limit
NPK-P	Maximum allowable concentration
AGW	Limit value for the workplace (Arbeitsplatzgrenzwerte)
PBT	Persistent, bioaccumulative and toxic substances
vPvB	Very persistent and very bioaccumulative substances
DNEL	derived no-effect levels
PNEC	Predicted no-effect concentration
VOC	Volatile organic compounds
COD (CHSK)	Chemical oxygen demand
BOD (BSK)	Biological oxygen demand
ČSN	Czech national technical standard
ACGIH	American Conference of Governmental Industrial Hygienists
EC50	Substance concentration to which 50% of the population is exposed

IC50	Concentration causing 50% inhibition
LC50	Lethal concentration that can be expected to be fatal for 50 % of the population
LD50	Lethal dose that can be expected to be fatal for 50 % of the population
ICAO	International Civil Aviation Organisation
IATA	International Air Transport Association
IMDG	International marine transport of dangerous goods
MARPOL	International convention on prevention of marine pollution by vessels
IBC	International regulation for building and equipment of vessels for mass transport of hazardous chemicals
OEL (LHE)	Occupational exposure limit
NOEC	No observed effect concentration
NOELR	No observable effect loading rate

c)Key literature references and data sources:

None specified.

d)Hazard assessment and classification of the mixture:

Assessment of the mixture was based on an expert opinion and the conventional calculation method specified in Regulation 1272/2008/EC.

e)List of standard hazard statements

Not used

f) Advice for personnel training

Not required for small consumers; normal training is required for professional use and handling of hazardous substances and mixtures; standard occupational safety training. The data safety sheet should always be available to the workers.

g)Additional information

The safety data sheet has been drawn up according to Czech Act 350/2011 Coll., EC Regulation 1907/2006 (REACH), EC Regulation 1272/2008 (CLP) and EU Commission Regulation 2015/830. The information stated only describes the safety properties of the product and is based on our current knowledge.
The supplier's specifications are given in the applicable product sheets. This information is not a guarantee of the properties of the described products in the sense of legislative guarantees.
This information relates only to the above-mentioned product in the as-delivered condition and may not be valid for use with another product or in a different application

area. If the substance or mixture is used in a manner other than stated in this MSDS, the supplier shall not be liable for any damage.
The MSDS does waive the user's obligation to acknowledge and observe all legal regulations regulating the user's operations. Only the user is liable for implementing the measures related to the method by means of which the product is used.
The system of mentioned legal measures and regulations is intended to help the addressee to fulfil their obligations. However, their list cannot be considered as exhaustive. The user must ensure that they do not need to comply with any additional obligations, which do not directly arise from the cited data.

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