

SAFETY DATA SHEET

(EC 1907/2006, amended by EU 2015/830) | January 2021 – Version 9.0



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

1.1 Product identifier:

Commercial name:	Genan rubber granulate: • GENAN FINE • GENAN FINE/MIX • GENAN MEDIUM • GENAN COARSE • GENAN SUPER COARSE • GENAN ULTRA COARSE • GENAN MEGA COARSE
Type of product:	Free-flowing, homogeneous and uniform, black rubber granulate derived from end-of-life tyres through granulation and cleaning.

1.2 Relevant identified uses of the substance / mixture – and uses against which we advise:

Relevant, identified uses:	Artificial turf, playgrounds, athletic fields, flooring, thermal insulation, acoustic insulation, paint, moulded products etc.
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1.3 Details of the supplier of the safety data sheet:

Manufacturer:	Genan A/S Jegindøvej 16 DK-8800 Viborg Denmark	Genan, S.A. Lugar da Pardala Estrada Nacional 109, Km 31 PT-3880-728 São João de Ovar Portugal	Genan GmbH Gottlieb-Daimler Straße 34 D-46282 Dorsten Germany	Betriebsstätte Oranienburg: Birkenallee 80 D-16515 Oranienburg Germany	Betriebsstätte Kammlach: Im Gewerbepark Unterallgäu 1 D-87754 Kammlach Germany	Genan Inc. 18038 Beaumont Hwy. Houston TX77049 USA
Telephone:	+45 8728 3000	+351 256 580 600	+49 2362 9527 0	+49 3301 5780	+49 8261 7369 0	+1 713 6748500
Fax:	-	-	+49 2362 9527 150	+49 3301 578 150	+49 8261 7369 150	+1 713 6748501
E-mail address:	info-dk@genan.com	info-pt@genan.com	info-de@genan.com			info-us@genan.com
1.4 Emergency telephone no.:	Giftlinjen: +45 82 1212 12	CIAV (Centro de Informação Antivenenos): +351 800 250 250	Giftnotrufzentrale: +49 (0)361 730 730 / +49 (0)551 19 240 / +49 (0)228 19 240 +49 (0)6131 19 240 / +49 (0)6841 19 240 / +49 (0)761 19 240 +49 (0)89 19 240 / +49 (0)30 19 240			Poison Control: +1 800 222 1222

SECTION 2: Hazard identification

2.1 Classification of the substance / mixture: According to Regulation (EC) No. 1272/2008 and its amendments	Products classified as not dangerous.
2.2 Label elements: According to Regulation (EC) No. 1272/2008 and its amendments	Not applicable.
2.3 Other hazards:	Products do not contain any substances classified as PBT or vPvB under REACH Annex XIII. Rubber dust and air may result in explosive mixtures.

SECTION 3: Composition / information on ingredients

3.1 Substances:	Not applicable.
3.2 Mixtures:	Vulcanised polymer base: NR, SBR, BR, IIR/XIIR, originating from end-of-life tyres.

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SECTION 4: First aid measures

4.1 Description of first aid measures:	Pay attention to self-protection; remove victims from hazardous area; keep warm; position comfortably and cover well; do not leave affected persons unattended.
In case of inhalation:	Provide fresh air, seek medical advice if necessary.
In case of skin contact:	Wash hands before breaks and at the end of a workday.
In case of eye contact:	With eye held open, immediately rinse thoroughly with plenty of water for at least 15 minutes; seek medical advice if necessary.
In case of ingestion:	Rinse mouth; seek medical advice if necessary.
Self-protection of the first aider:	See general notes above.
4.2 Most important symptoms and effects – immediate as well as delayed:	No information available.
4.3 Indications of any immediate medical attention and/or special treatment needed:	Not relevant.

SECTION 5: Fire fighting measures

5.1 Extinguishing media:	Suitable extinguishing media: foam, extinguishing powder, CO ₂ , sand.
5.2 Special hazards arising from the substance / mixture:	Heavy smoke, dangerous vapours in case of fire cannot be excluded.
5.3 Advice for fire fighters:	Remove product from hazard area as soon as possible. Wear protective face mask / respiratory protection due to heavy smoke formation.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	For personnel not involved in emergency response: no protective equipment or emergency procedures are required. For personnel responsible for emergency response: see section 5.3.
6.2 Environmental precautions:	Products not classified as dangerous for the environment. Keep away from sewage, surface water and ground water.
6.3 Methods and material for containment and clean-up:	To contain spillage, use bags or containers, as granules are solid products. For clean-up, collect mechanically – preferably in dry conditions – by aspiration. Use a dust-ignition proof model, class B1.
6.4 Reference to other sections:	See sections 8 and 13 for further information.

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SECTION 7: Handling and storage

7.1 Precaution for safe handling:

Measures to prevent fire:	Take measures against electrostatic discharge. Keep far away from sources of ignition.
Advice on general occupational hygiene:	Avoid dust formation. Provide for adequate exhaust ventilation and dust collection at machinery. Do not eat, drink or smoke in work areas. Wash hands after contact. Remove contaminated clothing and personal protective equipment before entering kitchen or canteen areas. Comply with personal hygiene measures. Ensure proper cleaning of personal protective equipment. Showering at the end of shifts is recommended. Ensure to wash workwear daily.

7.2 Conditions for safe storage, including any incompatibilities:

Technical measures and storage conditions:	Under cover, frost-free and dry, protected from moisture and sun light (UV). Frozen and wet material may result in agglomeration of material. Confined spaces must be well ventilated. Do not store with food or fodder.
Packaging materials:	Keep packaging closed and away from water.
7.3 Specific end use(s):	Except for the indications already specified, no special recommendations regarding the uses of these products are necessary.

SECTION 8: Exposure controls / personal protection

8.1 Control parameters:

Substances, the occupational exposure limit values of which must be controlled in the working environment:	There are no environmental limit values for the substances of which these products consist.
DNEL (workers):	Information not available
DNEL (population):	Information not available
PNEC:	Information not available

8.2 Exposure control:

Appropriate engineering controls:	None
Personal protection equipment:	As a prevention measure, it is recommended to use basic personal protective equipment with CE marking. For more information on personal protective equipment (storage, use, cleaning, maintenance, protection class etc.), consult the information leaflet provided by the PPE manufacturer.
Eye and face protection:	Wear protective glasses with side protection in compliance with CEN: EN 166:2001 / EN ISO 4007:2018.
Skin protection:	Use protective gloves in compliance with CEN: EN 420:2003+A1:2009.
Respiratory protection:	Wear protective face mask in case of generation of dust – in compliance with CEN: EN 149:2001+A1:2009.
Thermal hazards:	Do not inhale vapours from hot product.
Environmental exposure controls:	None

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	Rubber granulate: • GENAN FINE • GENAN FINE/MIX • GENAN MEDIUM • GENAN COARSE • GENAN SUPER COARSE • GENAN ULTRA COARSE • GENAN MEGA COARSE particle size: 0.8-2.0 mm particle size: 0.8-3.0 mm particle size: 1.4-3.0 mm particle size: 2.0-4.0 mm particle size: 1.5-5.0 mm particle size: 2.0-6.0 mm particle size: 3.0-7.0 mm
Colour:	Black
Odour:	Typical rubber smell
Odour threshold:	Data not available
pH value:	N/A
Melting point / freezing point:	N/A
Initial boiling point and boiling range:	N/A
Flash point:	> 400°C [DIN EN 50281-2-1 // VDE 0170/0171 section 1503-2-1]
Evaporation rate:	N/A
Flammability (solid, gas):	Data not available
Upper/lower flammability or explosion limits:	Data not available
Vapour pressure:	N/A
Vapour density:	N/A
Specific density:	1,100-1,200 kg/m ³
Solubility:	N/A
n-octanol/water partition coefficient:	N/A
Auto-ignition temperature:	110°C [VDI 2263 page 1]
Decomposition temperature:	N/A
Viscosity:	N/A
Explosive properties:	Depends on fraction sizes, processes and environmental conditions.
Oxidising properties:	N/A

9.2 Other information:

Bulk density:	• GENAN FINE • GENAN FINE/MIX • GENAN MEDIUM • GENAN COARSE • GENAN SUPER COARSE • GENAN ULTRA COARSE • GENAN MEGA COARSE 395 kg/m ³ 420 kg/m ³ 425 kg/m ³ 455 kg/m ³ 465 kg/m ³ 465 kg/m ³ 520 kg/m ³
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SECTION 10: Stability and reactivity

10.1 Reactivity:	Products are not reactive.
10.2 Chemical stability:	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions:	No known hazardous reactions.
10.4 Conditions to avoid:	Avoid fire, as CO, CO ₂ , SO ₂ , SO ₃ , different nitrogen compounds, minor amounts of HCL and/or HBr may then be released.
10.5 Incompatible materials:	None known
10.6 Hazardous decomposition products:	None known

SECTION 11: Toxicological information

11.1 Information on toxicological effects:	In respect of toxicological properties, no experimental data are available for the products.
Acute toxicity:	Data not available
Skin corrosion / irritation:	Data not available
Serious eye damage / irritation:	Data not available
Respiratory or skin sensitisation:	Data not available
Germ cell mutagenicity:	Data not available
Carcinogenicity:	Data not available
Reproductive toxicity:	Data not available
Toxicity to specific target organs (STOT) – single exposure:	Data not available
Specific target organ toxicity – repeated exposure:	Data not available
Aspiration hazard:	Data not available

SECTION 12: Ecological information

12.1 Toxicity:	Products are non-water-soluble rubber granulates. Acute toxicity: data not available Chronic toxicity: data not available
12.2 Persistence and degradability:	Biodegradation: data not available
12.3 Bioaccumulative potential:	Data not available
12.4 Mobility in soil:	Data not available
12.5 Results of PBT and vPvB assessment:	Data not available
12.6 Other adverse effects:	Data not available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods:

Handling in accordance with good industrial hygiene and safety practices. Products are not classified as hazardous according to the criteria of the CLP [Regulation (EC) No. 1272/2008], nor is the waste generated hazardous (empty packaging and product or non-compliant product remains) according to the criteria set out in Commission Regulation (EU) No. 1357/2014 of 18 December 2014.

The responsibility for waste classification lies with the producer of waste, and waste classification must follow the methodology presented in Commission Decision 2014/955/EU of 18 December 2014, considering the waste-generating processes/ activities in question.

Empty packaging and product waste shall be delivered to a Licensed Waste Management Operator for the best recovery and/or disposal options, in accordance with local regulations complying with Directive 2008/98/EC.

Disposal through the sewage system is not recommended.

The transportation of residues in national territory must comply with local rules and regulations.

SECTION 14: Transport information

These products are not subject to transportation regulations.

14.1 UN number: N/A

14.2 UN proper shipping name: N/A

14.3 Transport hazard class(es): N/A

14.4 Packaging group: N/A

14.5 Environmental hazards: N/A

14.6 Special precaution for user: N/A

14.7 Transportation in bulk according to MARPOL Annex II and the IBC Code: N/A

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SECTION 15: Regulatory information

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

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), and its amendments:	
Limitations on the marketing and use of certain dangerous substances and mixtures (Annex XVII):	Compliance with restrictions 28 and 50
Candidate substances for authorisation:	Not applicable
Substances included in Annex XIV (authorisation list) and expiry date:	Not applicable
Commission Regulation (EU) 2015/830 of 28 May 2015 on requirements for Safety Data Sheets:	Applicable
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, and its amendments:	Not applicable
Regulation (EC) No. 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer:	Not applicable
Regulation (EU) No. 528/2012 of the European Parliament and of the Council of 22 May concerning the placing on the market and use of biocidal products:	Not applicable
Regulation (EC) No. 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants:	Not applicable
Regulation (EU) No. 649/2012, of the European Parliament and of the Council of 4 July 2012, concerning the export and import of dangerous chemicals and Regulation (EU) No. 649/2012:	Not applicable
Directive no. 2012/18/EU, of the European Parliament and Council of July 4, 2012 (Seveso III Directive):	Not applicable
Directive no. 2009/161/EU, of the Commission of 17 December on the protection of workers' health and safety against risks related to chemical agents at work:	Not applicable
Directive 2008/98/EC of the European Parliament and of the Council, of 19 November 2008:	Applicable
Regulation (EU) No. 1357/2014 of the Commission of 18 December 2014 – Classification of the hazardousness of waste:	Not applicable
Commission Decision 2014/955/EU of 18 December 2014 - European Waste List:	Applicable
Particular provisions regarding the protection of people or the environment:	It is recommended to use the information compiled in this safety data sheet as input for a risk assessment of local circumstances with the aim of establishing the necessary risk prevention measures for the handling, use, storage and disposal of these products.

15.2 Chemical safety assessment:

The supplier has not carried out a chemical safety assessment for these products, as products are not classified as hazardous (according to Regulation (EC) No. 1272/2008 and its amendments), and a chemical safety assessment consequently not required.

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SECTION 16: Other information

History of revisions:	This revision was designed to respect the structure and contents required for a Safety Data Sheet in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015.	
Legend of abbreviations and acronyms used:	CE	European Conformity
	CEN	European Committee for Standardization
	DNEL:	Derived no-effect level
	PPE:	Personal protective equipment
	UN:	United Nations
	PBT:	Persistent, bioaccumulative and toxic
	PNEC:	Predicted no-effect concentration
	vPvB:	Very persistent, very bioaccumulative
Bibliographical references and data sources:	https://eur-lex.europa.eu https://www.echa.europa.eu/pt/web/guest/home	
Classification procedure:	Not applicable, as products are not classified as hazardous (according to Regulation (EC) No. 1272/2008 and its amendments).	
List of relevant hazard and/or precautionary statements:	Not applicable, as products are not classified as hazardous (according to Regulation (EC) No. 1272/2008 and its amendments).	
Training advice:	Minimum training in occupational risk prevention is recommended for staff handling these products in order to facilitate the understanding and interpretation of this safety data sheet.	
The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given only serves as a guidance for safety handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Genan is not liable for missing or incorrect information, nor any consequential damage suffered due to the use of this document.		

TECHNICAL DATA SHEET



Product name	Revised
GENAN COARSE	01.05.2022

Product description

Free-flowing, homogeneous and uniform, black rubber granulate derived from end-of-life tyres through granulation and cleaning.

Contact Data of Manufacturer

Plant:	Genan A/S Jegindøvej 16 DK-8800 Viborg Denmark	Genan GmbH Gottlieb-Daimler Straße 34 D-46282 Dorsten Germany	Betriebsstätte Oranienburg: Birkenallee 80 D-16515 Oranienburg Germany	Betriebsstätte Kammlach: Im Gewerbepark Unterallgäu 1 D-87754 Kammlach Germany	Genan, S.A. Lugar da Pardala Estrada Nacional 109, Km 31 PT-3880-728 São João de Ovar Portugal	Genan Inc. 18038 Beaumont Hwy. Houston TX77049 USA
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Fax:		+49 2362 9257 150	+49 3301 578 150	+49 8261 7369 150		+1 713 6748501
E-mail:	info-dk@genan.com	info-de@genan.com			info-pt@genan.com	info-us@genan.com

Typical properties

Properties	Test methods	Unit	Specification	Typical values
Specific density	ASTM D1817-05(2016)	kg/m ³	1.100-1.200	1.160
Bulk density	EN 1097-3:1998	kg/m ³	455 ±8%	455
Particle size range	ISO 13322-2:2006	mm	2.0-4.0	2.0-4.0
Total polymer content (RCH)	ISO 9924-3:2009	%	> 40	45
Ash content	ISO 9924-3:2009	%	< 15	8
Moisture content (Loss: 2h @ 105°C)	ASTM D1509 - 15	%	< 1	< 1
Free metal content	OA-698; (Note 1)	%	< 0,004	< 0,002
Free fibre content	OA-698; (Note 1)	%	< 0,002	< 0,001
Content of coloured rubber particles (Note 2)	OA-698; (Note 1)	%	< 0,1	< 0,04
Other contamination	OA-698; (Note 1)	%	< 0,004	< 0,002
Inhalable dust classification	EN 15051-2:2013+A1:2016		Very low to low	Very low
PAH 8 REACH	AFPS GS 2019:01 PAK	mg/kg	< 20	< 15

Note 1: Non-standardized test method "Determination of bulk density and free impurities in rubber powder and granulate", which your Genan representative will forward upon request. This test method is chosen as values obtained from the use of ASTM D5603 are below the detection limits.

Note 2: Values for material manufactured at the Houston plant may exceed values stated.

Remarks

DIN 18035-7:2019	GENAN COARSE complies with all requirements in relation to migration according to DIN 18035-7:2019.
EN 71-3:2019	GENAN COARSE complies with all requirements according to EN 71-3:2019_Safety of Toys - Part 3: Migration of certain elements.
ASTM F3188-16	GENAN COARSE complies with all requirements according to ASTM F3188-16_Standard Specification for Extractable Hazardous Metals in Synthetic Turf Infill Materials.
PAH 8 REACH	A material sample has been extracted in accordance with EN 17409:2019, and the result is presented as a moving average of the 4 most recent analyses.
Particle size distribution	Information on the actual particle size distribution is available on the relevant sieve curves, which may be downloaded from the Genan website at any time.
Health & Safety	Guidelines on health and safety are stated in the relevant Safety Data Sheet, which may be downloaded from the Genan website at any time.

Characteristics stated are typical for the product. The product is derived from a large number of different tyres; consequently, Genan cannot give any exact values on the chemical composition of the material. The above-mentioned characteristics and values have been prepared to the best of our knowledge, and Genan shall not be liable for any insufficiency or inaccuracy in such information.

CERTIFICATIONS

Genan A/S

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018

Genan GmbH

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018

Genan Inc.

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018

Genan, S.A.

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018