POVER BIOSE GRANULES®

Powered by plants | Low water & CO₂ footprint | Biodegradable

PowerGranules BIO is pure power - eliminating pre-washing forever. All while being kind to the environment.

A GREENER OPTION.

We've tested and tried for hours and hours, to find a Granule with the right shape, density and size, to efficiently clean your wash ware. All while being kind to the environment. PowerGranules BIO is biobased and made from three main ingredients: calcium salt, rapeseed oil and a combination of biodegradable esters.

Its special composition gives it the right characteristics; hard enough to remove even baked-on food, but soft enough not to harm your cook ware - and, of course biodegradable.

PowerGranules BIO is in full compliance with the EU requirements for use in contact with food, and harmless in case of ingestion.

WE > TO SAVE THE PLANET.

Our smart pot washing solutions use in average 70% less water, chemicals, and energy than other pot washing methods. With the introduction of biobased PowerGranules BIO our award-winning technology becomes even more sustainable. For example, our new Granule has a 25% lower ${\rm CO_2}$ footprint, and demands 87% less water in the manufacturing process than our original PowerGranules.

USAGE & DURABILITY.

PowerGranules BIO is compatible with all solutions from GRANULDISK, old and new. However, due to differences in the material composition, we do not recommend mixing them with the original PowerGranules.

PowerGranules BIO will last for 2.500 cycles in average, depending on the most frequently used wash programme, pot washing model and your wash ware.

GD Memo™ keeps tabs on number of run wash cycles and reminds the operator when the Granules are worn out and it is time for an exchange.

RECYCLING & WASTE MANAGEMENT.

Used PowerGranules BIO are recycled as combustible waste. The packaging is made from 40% recycled material (Polypropylene) and can be recycled as plastic waste.



ASSORTMENT.



SAFETY DATA SHEET

The safety data sheet is in accordance with 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). Also in accordance with Regulation (EC) No 1272/2008 (CLP).

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IDENTIFICATION OF THE SUB- STANCE AND OF THE COMPANY	1.1 Product identifier: PowerGranules BIO® 1.2 Relevant identified uses: Granulate used in pot and pan washing machines. 1.3 Supplier: GRANULDISK AB, Jägershillgatan 13, SE-213 75 Malmö, Sweden, +46 (0)40-6715060, info@granuldisk.com 1.4 Emergency information: +46 (0)40 6715060 (office hours) or call your local emergency number
2. HAZARDS IDENTIFICATION	2.1 No need for classification according to GHS criteria for this product. 2.2 The product does not require a harzard warning label in accordance with GHS criteria and EC Directives. 2.3 The product is compliant with the REACH Regulation, with Annex II in Regulation (EU) 2015/830 and with CLP Regulation 1272/2008.
3. COMPOSITION/INGREDIENTS	3.1 Substances: PBAT, CAS no. 55231-08-8; Calcium Carbonate, CAS no. 471-34-1; Rapeseed oil CAS no. 8002-13-9 3.2 Mixtures: biodegradable polyester, mineral and vegetable oil
4. FIRST AID MEASURES	In room temperature, the product is not irritating and will not form any dangerous gases.
Ingestion:	Rinse mouth and then drink plenty of water. If difficulties occur, seek medical attention.
Inhalation:	After inhalation of decomposition products, move the affected person to a source of fresh air and keep calm. Provide medical air If difficulties occur after dust has been inhaled, move to fresh air and seek medical attention.
Skin contact:	Areas affected by molten material should be quickly placed under cold running water. Burns caused by molten material require hospital treatment.
Eye contact:	In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.
5. FIREFIGHTING MEASURES	5.1 Extinguish with water spray, foam, dry powder or carbon dioxide. 5.2 Special hazards: Carbon monoxide, carbon dioxide, tetrahydrofuran, fumes/smoke, carbon black, harmful vapours. Formation of further decomposition and oxidation products depends upon the fire conditions. Under special fire conditions trace of other toxic substances are possible. 5.3 Advice for fire-fighters: Special protective equipment, wear a self-contained breathing apparatus.
6. ACCIDENTIAL RELEASE MEASURES	6.1 Sweep up spilled Granules to prevent risk of slipping or of Granules being flushed down the drain. Handle as non-hazardou industrial waste, see point 13.6.2 Environmental precautions: No special precautions necessary.
7. HANDLING AND STORAGE	Protect against moisture. Avoid extreme heat. Avoid all sources of ignition: heat, sparks, open flame.
8. EXPOSURE CONTROLS/ PERSONAL PROTECTION	Wear a protective mask, protective goggles and possibly also protective clothing when handling molten material. Wash your hands after direct contact with Granules that has been in the potwasher due to detergent residues. Harmful gases may be formed in case of fire or thermal breakdown.
9. PHYSICAL AND CHEMICAL PROPERTIES	
Form:	Granules
Color:	Green
Density:	1,4 - 1,45 gr/cm³
Melting range	115 - 125 °C (DIN 53736)
Flash point:	> 280 °C (ASTM D1929)
Solubility in water:	Non soluble
Boiling range:	The substance/product decomposes therefore not determined.
Fire promoting properties: 10. STABILITY AND REACTIVITY	Not fire-propagating 10.1 No hazardous reactions if stored and handled as prescribed/indicated. 10.4 Conditions to avoid: Extreme heat and alla sources of ignition: heat, sparks, open flame 10.5 Substances to avoid: strong oxidizing agents
11. TOXICOLOGICAL INFORMATION	The product is approved for food contact.
Acute toxicity:	Virtually nontoxic after a single ingestion. The product has not been tested. The statement has been derived from the properties of the individual components. In the event of discomfort, seek medical advice.
Irritation:	Not irritating to the eyes. Not irritating to the skin. Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.
Respiratory/Skin sensitization:	Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from the properties of the individual components.
12. ECOLOGICAL INFORMATION	12.1 Ecotoxicity: The product is not considered as toxic.12.2 Persistence and degradability: The product is biodegradable under certain circumstances. For more information, contact GRANULDISK.12.3 Bioaccumulative potential: Because of the product's consistency and low water solubility, bioavailability is improbable.
13. DISPOSAL CONSIDERATIONS	
Spillage or unused Granules:	Handled as non-hazardous industrial waste. Appropriate for sorting as combustible waste.
Used Granules:	Should be sealed in a plastic bucket with a lid or in a plastic bag before being disposed of as combustible waste. N.B. Biodegradable Granules can <u>not</u> and should <u>not</u> be recycled with other recyclable plastic waste!
14. TRANSPORT INFORMATION	General: Not classified as a dangerous goods under transport regulations.
15. REGULATORY INFORMATION	This product is not regulated by Swedish law. Take note of federal, state and local regulations.
16. OTHER INFORMATION	According to EU law, this product is not classified as dangerous.

The information given in this safety data sheet is correct to the best of our knowledge and as far as we can determine at the date of its publication. This information is intended only as a guide for safe handling, use, processing, storage, transport, waste management and emissions, and must not be regarded as constituting a guarantee or quality specification. The information relates only to the material specified and does not apply to this material when used in combination with any other material or process not specified in the text.

