

UgnCleanPellets® S 3.5 BIO

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



UGN
UMWELTTECHNIK

1 CHEMICAL PRODUCT/MIXTURE AND COMPANY IDENTIFICATION

| | |
|----------------------------|---|
| Product Identifier: | UgnCleanPellets® S 3.5 BIO (Trade Name) |
| Product Use: | Filter pellets for gas desulphurisation. |
| Mode of action | Hydrogen sulphide is chemically bound and transformed into elemental sulphur. |
| Manufacturer: | UGN-Umwelttechnik GmbH Gewerbepark Keplerstraße 20 DE - 07549 Gera |
| Telephone: | +49 (0)365 830 58 98 |
| Fax: | +49 (0)365 710 69 31 |
| Homepage: | www.ugn-umwelttechnik.de |
| E-mail: | info@ugn-umwelttechnik.de |

2 COMPOSITION/INFORMATION ON INGREDIENTS

| CONTENT [%] | INGREDIENT |
|-------------|--|
| 20 - 25 | Draff; Fodder → CAS: none |
| 30 - 60 | Calcium carbonate (CaCO ₃) → CAS: 471-34-1 |
| 5 - 25 | Magnesium carbonate (MgCO ₃) → CAS: 546-93-0 |
| 10 - 35 | Iron(III) oxide-hydroxide (FeO(OH)) → CAS: 20344-49-4 |

3 HAZARDS IDENTIFICATION

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|-----------------------------------|------------------------------|
| Physical-chemical hazards: | No particular hazards known. |
| Biological hazards: | No particular hazards known. |
| Health hazards: | No particular hazards known. |
| Environmental threats: | No particular hazards known. |
| Other hazards: | None. |
| Hazard symbols: | None. |
| Hazard statements | None. |



4 FIRST-AID MEASURES

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|---|---|
| General Information: | Change clothes when covered with material dust. |
| Inhalation: | Seek medical attention when experiencing disorders after inhaling dust. |
| Skin contact: | Wash with water and soap. |
| Eye contact: | Rinse thoroughly with water; Seek medical attention in case of ongoing irritation. |
| Ingestion: | Seek medical attention after ingesting material. |
| Information for doctor or paramedic: | Treat according to symptoms. |

5 FIRE-FIGHTING MEASURES

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| General Information: | Product is combustible (fire class A). |
| Suitable means of extinction: | Water, foam, powder. |
| Unsuitable means of extinction: | None. |
| Particular hazard posed by the substance or its mixture, combustion products, or emerging gases: | Decomposition products, such as <ul style="list-style-type: none">• Carbon dioxide,• Carbon monoxide,• Smoke. |
| Special protective equipment for firefighting: | None. |
| Additional information: | Product will char like compressed paper. |

6 ACCIDENTAL RELEASE MEASURES

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| Personal precautionary measures: | Avoid dust formation. Use respirator in case of dust formation. |
| Environmental protection measures: | No measures necessary. |
| Cleaning procedure: | Remove mechanically. Avoid dust formation. Dispose of removed material according to applicable law. |

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7 HANDLING AND STORAGE

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| Handling precautions: | Avoid dust formation and deposition. |
| Fire precautions: | Keep away from ignition sources. |
| Storage requirements: | Keep dry, consider fire loading. |
| Notes on combined storage: | Store away from food. |
| Other information on storage conditions: | Max. stacking height 3.00 m. VCI storage class 11, combustible solid. |

8 EXPOSURE CONTROLS/PERSONAL PROTECTION EQUIPMENT

| | |
|---|---|
| Additional information on designing technical systems: | None. |
| Components with work place-related limits to be monitored: | Breathable fraction OEL = 10.0 mg/m ² (general OEL for dust). |
| Breathing apparatus: | P2 dust filter recommended. |
| Hand protection: | Gloves recommended. |
| Eye/face protection | Not necessary. |
| Body protection: | Not necessary. |
| General protective measures: | Not necessary. |
| Hygienic measures | Wash hands prior to breaks and after work. Use skin protection balm as a means of prevention. Do not eat, drink, smoke, or snuff when using this product. |
| Limitation and monitoring of environmental exposure: | Not necessary. |



9 PHYSICAL AND CHEMICAL PROPERTIES

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|------------------------------|---|
| Form: | Pellets; Ø 7 – 13 mm, length approx. 20 – 60 mm |
| Colour: | Russet. |
| Smell: | Slightly limy. |
| Change of state: | Decomposition temperature 288 °C (charring). |
| Ignition temperature: | Not available. |
| Auto flammability: | Not known. |
| Oxidising properties: | Medium. |
| Bulk density: | 0.5 kg/l |
| pH value: | 8 – 9 (moist) |

10 STABILITY AND REACTIVITY

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| Dangerous reactions: | <ul style="list-style-type: none">• May react with oxidising agent.• With new pellets, residue carbonatation may lead to short-term heat release (up to 80 °C). (Countermeasure: additional sprinkling/moistening). |
| Dangerous decomposition products: | None known. |

11 TOXICOLOGICAL INFORMATION

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| Acute toxicity: | None known. |
| Additional information on toxicity: | Not necessary. |

12 ECOLOGICAL INFORMATION

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| General Information: | The material shows no adverse effects on the environment. |
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13 DISPOSAL CONSIDERATIONS

Product Identifier: The source materials used for the pellet production are listed in the German fertilizer regulation (Düngemittelverordnung – DüMV) as soil additives or fertilizer, or as source products for fertilizer production.

- Lime → DüMV Anlage 1 Abschnitt 1.4.1
- Stone dust (dolomite) → DüG § 2 Punkt 6 i.V.m. § 4 (3) DüMV
- Iron oxide hydrate → DüMV Anlage 2 Tabelle 8 Punkt 8.1.4
- Draff → DüMV Anlage 2 Tabelle 7 Punkt 7.1.2

The accredited EUROFINS Argranalytik Deutschland GmbH laboratory classified the used-up pellets as organo-mineral CA fertilizer 13.00 containing magnesium, iron, and sulphur. Agricultural application of the used-up pellets must be confirmed with the relevant local authorities (Düngemittelverkehrs-kontrolle) according to the soil's fertilizer requirement.

Uncleaned packaging: Packaging must be completely emptied and recycled according to local laws if possible. Typically, the material can be returned to the supplier.

14 TRANSPORT INFORMATION

ADR classification: No dangerous goods.

IMDG classification: No dangerous goods.

IATA classification: No dangerous goods.

15 REGULATORY INFORMATION

Labelling as per EC directives: No labelling requirements for this product.

National regulations in Germany

Water hazard class: Not hazardous.

VCI storage class: Class 11: Combustible solid.

Hazard statements: None.



15 REGULATORY INFORMATION

P-Statements:

P102: Keep out of reach of children.
P202: Do not handle until all safety precautions have been read and understood.
P262: Do not get in eyes, on skin, or on clothing.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302 and P352: IF ON SKIN: Wash with plenty of water and soap.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P313: Get medical advice/attention.

16 OTHER INFORMATION

General information:

The above information is based on our current knowledge and experience. This safety data sheet describes products in regard to the relevant safety measures.

The information given herein represents no assurance of properties whatsoever and does not establish a contractual relationship.