

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 1 of 17
------------------	--------------	-----------------------	--------------

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

1.1 Product identifier	
Substance name	Slags, ferrous metal, blast furnace
Trade names	Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)
CAS number	65996-69-2
EC number	266-002-0
REACH Registration No.	01-2119487456-25-0073
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Identified uses	At industrial sites, the substance is used as a raw material for glass production, formed building materials, and stone wool (rock wool). It is also used in the manufacture of concrete grout, mortar, self-levelling compounds, clinker, and friction materials, as well as for slag classification and sieving. Widespread uses by professional workers include its application in road and pavement construction, gravel covering layers (including paddocks and roofing), embankments, earthworks, and railway ballast. The substance is also used in wastewater and water treatment, in the preparation of concrete grout, mortar, and self-levelling compounds, as a fertilizer and soil conditioner, for sandblasting, in fire-sealing products, and as a raw material for building materials. Consumer uses comprise small-scale application in road and pavement construction, gravel layers (including paddocks and roofing), wastewater and water treatment, mortar and self-levelling compound preparation, as a fertilizer and soil conditioner, in fire-sealing products, and as an additive in building materials.
Uses advised against	The substance should only be used as specified above. Any use outside the identified scope is not recommended unless prior consultation with the supplier has taken place.

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 2 of 17
------------------	--------------	-----------------------	--------------

1.3 Details of the supplier of the safety data sheet	
Supplier (Importer)	EastGas SRL
Street address	Str. Elena Doamna nr. 59, Floor 4, Office 12
Postcode and city	700398 IASI
Country	ROMANIA
Telephone number	+40750794278
e-mail address of competent person responsible for the SDS	e-mail: office@eastgas.ro Rusu Nicolai
1.4 Emergency telephone number	
112	

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP Regulation)	2.1.2 Additional information
The substance is not classified as hazardous according to Regulation (EC) No 1272/2008.	None
2.1.3 The most important adverse physical, human health and environmental effects	
Physical and chemical properties: The substance is an inert solid material. It is not flammable, explosive, or oxidising. No adverse physical hazards are expected. Human health: Inhalation of dust may cause transient mechanical irritation of the respiratory tract, with possible symptoms such as coughing, dryness of the throat, or a scratchy sensation. Eye contact may result in temporary mechanical irritation, with symptoms such as redness, tearing, or a feeling of grittiness. Ingestion may cause mild gastrointestinal discomfort. No systemic health effects are anticipated. Environment: The substance is not considered hazardous to the environment. No adverse effects on aquatic or terrestrial organisms are expected.	
2.2 Label elements	



Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 3 of 17
-------------------------	---------------------	------------------------------	---------------------

3. COMPOSITION/INFORMATION ON INGREDIENTS

Blast furnace slag mainly contains the following mineral phases: melilite, pseudowollastonite, merwinite, calcium-magnesium-silicates, calcium-silicates, some minor quantities of calcite and glass.

Additional information: None.

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 4 of 17
------------------	--------------	-----------------------	--------------

4. FIRST AID MEASURES

4.1 Description of first aid measures	
General information	Show this safety data sheet to the doctor in attendance. No special measures required under normal conditions of use. In case of accident or if you feel unwell, seek medical advice.
In case of inhalation	Remove person to fresh air. Keep at rest in a position comfortable for breathing. Seek medical attention if symptoms persist.
In case of eye contact	Do not rub eyes, as the material is abrasive and may scratch the surface of the eye. To prevent irritation, flush immediately with a soft stream of water or eyewash for at least 5 minutes. If problems persist, continue rinsing and contact/visit a hospital or doctor.
In case of skin contact	Wash off with soap and water. Remove and wash contaminated clothing before re-use. However, the exposure does not pose a danger to either the victim or to people providing first aid.
In case of ingestion	Drink a couple of glasses of water. Contact a doctor if more than an insignificant amount has been swallowed.
Self-protection of the first aider	No special protective measures are required under normal conditions.
4.2 Most important symptoms and effects, both acute and delayed	
In case of inhalation	Dust may cause transient mechanical irritation of the respiratory tract. Symptoms may include coughing, dryness of the throat, or a scratchy sensation.
In case of eye contact	Exposure to dust may cause transient mechanical irritation. Symptoms may include smarting, pain, sensitivity to light, impaired vision.
In case of skin contact	No adverse effects on the skin are expected.
In case of ingestion	Ingestion may cause mild gastrointestinal discomfort. No systemic effects are expected.
Information to physician	Treat symptomatically based on clinical presentation.
First aid arsenal	A standard workplace first aid kit should be available in accordance with local occupational health regulations.
4.3 Indication of any immediate medical attention and special treatment needed	
Emergency medical assistance is generally not required. Symptomatic treatment only.	

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 5 of 17
------------------	--------------	-----------------------	--------------

Suitable extinguishing media	Use extinguishing media appropriate for surrounding fire. The substance itself is not flammable.
Unsuitable extinguishing media	Do not use strong water jets, as they may disperse dust and spread fire involving nearby combustible materials
5.2 Special hazards arising from the substance or mixture	
Hazardous combustion products	None.
5.3 Advice for firefighters	
Avoid breathing dust or decomposition fumes. Wear appropriate protective equipment and self-contained breathing apparatus (SCBA) when extinguishing fire in enclosed or poorly ventilated areas. Cool exposed containers with water spray if necessary.	

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures	
6.1.1. For non-emergency personnel	Avoid inhalation of dust and contact with skin and eyes. Use personal protective equipment as specified in Section 8 to prevent contamination of skin, eyes, and clothing. Ensure adequate ventilation. Avoid generation and accumulation of airborne dust.
6.1.2. For emergency responders	Wear protective clothing resistant to particulate penetration (e.g. disposable dust-proof coveralls), safety goggles, gloves, and a particulate respirator suitable for dust. Use equipment as specified in Section 8. Ensure good ventilation. Avoid procedures that may generate airborne dust. No special materials (e.g., anti-static or flame-retardant) are required for clothing or tools.
6.2 Environmental precautions	
The substance is not classified as hazardous to the environment. However, general good practice should be followed to avoid unnecessary release into the environment. Avoid generating dust. Prevent entry into drains, surface water and groundwater where feasible.	
6.3 Methods and material for containment and cleaning up	
6.3.1. Methods for containment	Prevent dust dispersion. Cover drains and use physical barriers (e.g. sandbags or bunding) to contain the material within a limited area.

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 6 of 17
------------------	--------------	-----------------------	--------------

6.3.2. Methods for cleaning up	Pick up mechanically. Spills can be cleaned with a vacuum cleaner. Wetting the product may be relevant to reduce dust formation.
6.4 Reference to other section	
For information on personal protective equipment (PPE), see Section 8. For information on waste disposal, see Section 13.	

7. HANDLING AND STORAGE

7.1 Precautions for safe handling	
7.1.1 Protective measures:	
Recommendations for safe handling	Keep product wetted with water to avoid or reduce dust emission. The substance is not flammable. The product does not maintain fire. Prevent spills. Do not allow the material to enter drains or watercourses. Avoid contact with incompatible materials (see Section 10).
Advice on general occupational hygiene	Do not eat, drink or smoke in work areas. Wash hands thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas.
7.2 Conditions for safe storage, including any incompatibilities	
7.2.1. Storage conditions	Storage can take place outdoors. If stored in stockpile at dry and windy weather keep slags moist to avoid dust formation.
7.2.2. Requirements for storage areas and containers	Ensure storage areas are designed to prevent environmental release. No special requirements for ventilation systems or building design beyond general dust control.
7.2.3. Incompatible materials	None
7.3 Specific end use(s)	
See Section 1.2. No other specific uses are foreseen apart from the intended use described in Section 1.2.	

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Occupational exposure limits
No specific occupational exposure limit has been established for the substance. In the absence of a substance-specific limit, general exposure limits for inert, insoluble or inorganic dust apply.

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 7 of 17
------------------	--------------	-----------------------	--------------

Country (Regulation)	Name	CAS-No.	Limit value (8 h), mg/m ³
Germany (TRGS 900)	Dust, respirable	-	1,25
Germany (TRGS 900)	Dust, inhalable	-	10,0
Finland (HTP)	Inorganic dust, total	-	10,0
Sweden (AFS 2018:1)	Respirable inorganic dust	-	2,5
Sweden (AFS 2018:1)	Inhalable inorganic dust	-	5,0
Denmark (AT)	Inhalable inorganic dust	-	10,0

National biological limit values

Not established

8.1.2 Information on monitoring procedures

Monitoring should be carried out in accordance with applicable national guidelines.

8.1.3. DNEL/DMEL values:

DNEL (Workers):

Substance name [CAS number]	Route of exposure	Acute effects		Chronic effects	
		Systemic	Local	Systemic	Local
Slags, ferrous metal, blast furnace [65996-69-2]	Oral	Not applicable	Not applicable	Not applicable	Not applicable
	Dermal	no hazard identified	no hazard identified	no hazard identified	no hazard identified
	Inhalation	no hazard identified	no hazard identified	no hazard identified	no hazard identified
	Eyes	Not applicable	no hazard identified	Not applicable	no hazard identified

DNEL (Consumers):

Substance name [CAS number]	Route of exposure	Acute effects		Chronic effects	
		Systemic	Local	Systemic	Local
Slags, ferrous metal,	Oral	No hazard identified	Not applicable	No hazard identified	Not applicable
	Dermal	No hazard identified	No hazard identified	No hazard identified	No hazard identified

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 8 of 17
------------------	--------------	-----------------------	--------------

blast furnace [65996-69-2]	Inhalation	No hazard identified	No hazard identified	no hazard identified	No hazard identified
	Eyes	Not applicable	no hazard identified	Not applicable	no hazard identified

8.1.4 PNEC values:	
Environmental protection target:	Slags, ferrous metal, blast furnace [65996-69-2]
<i>Fresh water</i>	5 g/L
<i>Marine water</i>	0.5 g/L
<i>Microorganisms in sewage treatment</i>	10 g/L
<i>Freshwater sediments</i>	insufficient hazard data available
<i>Marine sediments</i>	no hazard identified
<i>Air</i>	no hazard identified
<i>Soil</i>	1 000 mg/kg soil dw
<i>Food chain</i>	no potential for bioaccumulation
8.2 Exposure controls	
8.2.1. Appropriate engineering controls	
Engineering controls to prevent exposure	Engineering controls should be implemented to minimise the generation and accumulation of airborne dust. Where feasible, processes should be enclosed and equipped with local exhaust ventilation systems fitted with high-efficiency particulate air (HEPA) or equivalent filters. Surfaces should be cleaned regularly to avoid dust build-up.
8.2.2. Individual protection measures, such as personal protective equipment	
8.2.2.1 Eye and face protection:	Wear dust resistant safety goggles where there is danger of eye contact.
8.2.2.2 Skin protection:	
<u>Hand protection:</u>	Ordinary work glove in leather or similar (EN 388), thickness as required.
<u>Other skin protection:</u>	Wear suitable protective clothing
8.2.2.3 Respiratory protection	Use breathing protection mask with filter in case of dust formation.

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 9 of 17
------------------	--------------	-----------------------	--------------

	Use particle filter P3 (EN 140 (half or quarter mask), EN 143 (particle filter), EN 149 (filtering half mask against particles)).
8.2.2.4 Thermal hazards	None.
8.2.3. Environmental exposure controls:	
Substance related measures to prevent exposure	Avoid release of dust to the environment. Prevent material from entering drains, surface water or soil. Implement basic containment and housekeeping measures to avoid dispersion.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Physical state	Solid – Dusty.
Colour	Grey.
Odour	Odourless.
Melting point/range (°C)	1 400 °C.
Initial boiling point/range (°C)	2 000 °C.
Flammability	Ferrous slags are not flammable.
Lower and upper explosion limit	Do not apply to solids.
Flash point (°C)	Does not apply to solids.
Auto-ignition temperature (°C)	Does not apply to solids.
Decomposition temperature (°C)	Not applicable.
pH	100 g/L, 20 °C: – ABS: ~11 – GBS: ~10.
Kinematic viscosity	Does not apply to solids.
Solubility	Solubility in water: 0.01 mg/L.
Partition coefficient n-Octanol/Water (log Po/w)	–9 (estimated), not experimentally measurable due to extremely low value at 20 °C.
Vapour pressure, ca. 20 °C	0 Pa at 20 °C (extremely low vapour pressure; not measurable under standard conditions).
Density and/or relative density	Relative density at 20°C: 3.
Relative vapour density	Does not apply to solids.

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 10 of 17
------------------	--------------	-----------------------	---------------

Particle characteristics	Ground GBS (for production of cement) has a particle size distribution with the D50 of approximately 10-30 µm diameter with approximately 7 -19 % w/w in the range of 1-4 µm.
9.2 Other information	
9.2.1. Information with regard to physical hazard classes	Not applicable
9.2.2. Other safety characteristics	Not applicable

10. STABILITY AND REACTIVITY

10.1 Reactivity	Not reactive under normal conditions.
10.2 Chemical stability	Chemically stable under storage and use conditions.
10.3 Possibility of hazardous reactions	None.
10.4 Conditions to avoid	None.
10.5 Incompatible materials	None known under normal conditions.
10.6 Hazardous decomposition products	None. For hazardous combustion products, see Section 5.

11. TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008					
11.1.1. Toxicokinetics, metabolism and distribution					
Dermal absorption of components is negligible based on testing with similar slags (BOS, SMS).					
Inhalation studies with GGBS showed no toxic effects; toxicokinetic data cannot be derived.					
11.1.2 Acute toxicity		Based on available data, the classification criteria are not met. No acutely toxic effects were observed in relevant studies. Key supporting data are provided below.			
Substance name	Exposure route	Value	Exposure time period	Species	Method (as is, equivalent or similar)
Slags, ferrous metal, blast furnace	oral	LD ₅₀ > 2 000 mg/kg bw	Single dose	rat	OECD Guideline 401
	inhalation	LC ₅₀ > 5 235 mg/m ³ air	4 h	rat	OECD Guideline 403
	dermal	LD ₅₀ > 4 000 mg/kg bw	24 h	rat	OECD Guideline 402

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 11 of 17
------------------	--------------	-----------------------	---------------

11.1.3 Skin corrosion/irritation		Based on available data, the classification criteria are not met. No skin irritation observed in relevant studies. Key supporting data are provided below.		
Substance name	Relevance	Value	Species	Method (as is, equivalent or similar)
Slags, ferrous metal, blast furnace	no	Irritation parameter: erythema score Time point: 1/24/48/72 h Score: 0. Max. score: 0. Irritation parameter: edema score Time point: 1/24/48/72 h Score: 0. Max. score: 0	rabbit	OECD Guideline 404
11.1.4 Serious eye damage/irritation		Based on available data, the classification criteria are not met. No eye irritation observed in relevant studies. Key supporting data are provided below.		
Substance name	Relevance	Value	Species	Method (as is, equivalent or similar)
Slags, ferrous metal, blast furnace	no	Time point: 5 minutes Results: Haemorrhage – Score: 0 / Max: 0 Lysis – Score: 0 / Max: 0 Coagulation – Score: 0 / Max: 0 Reversibility: Not relevant, as no effects occurred No relevant effects observed Non-irritant to eyes	hen	in vitro irritation screening ICCVAm Test Method Evaluation Report
11.1.5 Respiratory or skin sensitization		Based on available data, the classification criteria are not met. The substance is not a skin or respiratory sensitizer. Key supporting data are provided below.		
Substance name	Relevance	Value	Species	Method (as is, equivalent or similar)
Slags, ferrous metal, blast furnace	No	Test substance (100 g/L leachate): 0/21 animals with positive reactions at 24 h and 48 h No clinical observations	guinea pig	OECD Guideline 406

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 12 of 17
------------------	--------------	-----------------------	---------------

		Negative control: 0/11 animals with positive reactions at 24 h and 48 h No clinical observations		
11.1.6 Germ cell mutagenicity		Based on available data, the classification criteria are not met. The substance is not classified as mutagen. Key supporting data are provided below.		
Substance name	Relevance	Value	Species	Method (as is, equivalent or similar)
Slags, ferrous metal, blast furnace	No	negative	Chinese hamster lung fibroblasts (V79)	<i>in vitro</i> EU Method B.17
	No	negative	mouse	<i>in vivo</i> OECD Guideline 474
11.1.7 Carcinogenicity		The substance is not classified as carcinogen. Key supporting data are provided below.		
Substance name	Relevance	Value	Species	Method (as is, equivalent or similar)
Slags, ferrous metal, blast furnace	No	Tumour incidence: – 1st slag wool: 6.1 % – 2nd slag wool: 2.1 % – Control (saline): 0 % (historical control up to 2 %)	rat	Intraperitoneal injection study with slag wool
11.1.8 Reproductive toxicity		Based on available data, the classification criteria are not met. No adverse effects on reproduction have been observed. Key supporting data are provided below.		
Substance name	Relevance	Value	Species	Method (as is, equivalent or similar)
Slags, ferrous metal, blast furnace	No	The study does not need to be conducted because (i) the substance is of low toxicological activity (no evidence of toxicity seen in any of the tests available), (ii) it can be proven from toxicokinetic data that no systemic absorption occurs via relevant routes of exposure (e.g. plasma/blood concentrations below detection limit using a sensitive method and absence of the substance and of metabolites of the substance in urine, bile or exhaled air) and (iii) there is no or no significant human exposure		

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 13 of 17
------------------	--------------	-----------------------	---------------

11.1.9 STOT-single exposure		Based on available data, the classification criteria are not met. No clinical effects have been observed in the acute toxicity studies available for the substance. As the substance is also inert, no specific organ toxicity is considered to exist.			
11.1.10 STOT-repeated exposure		Based on available data, the classification criteria are not met. No adverse effects or organ toxicity were observed in short-term repeated inhalation studies. Key supporting data are provided below.			
Substance name	Exposure route	Value	Exposure time period	Species	Method
Slags, ferrous metal, blast furnace	inhalation	NOAEL = 24.9 mg/m³ air	4 weeks	rat	OECD Guideline 412
	dermal, oral	Short-term or repeated dose toxicity studies via oral and dermal routes are not required. Inhalation is the most relevant route of exposure based on use patterns and substance properties. Ferrous slags are chemically inert, insoluble, not inhalable, and unlikely to be absorbed via skin or ingestion. No systemic toxicity was observed in a 28-day study.			
11.1.11 Aspiration hazard		Based on available data, the classification criteria are not met. The substance is a solid and does not pose an aspiration hazard under normal conditions of use.			
11.1.12 Adverse health effects and symptoms associated with exposure					
In case of inhalation		Exposure to dust may cause transient mechanical irritation of the respiratory tract, with symptoms such as coughing, throat dryness, or a scratchy sensation.			
In case of eye contact		Mechanical irritation may occur upon contact with dust, potentially causing smarting, pain, sensitivity to light, impaired vision.			
In case of skin contact		No adverse effects on the skin are expected.			
In case of ingestion		Ingestion may result in mild gastrointestinal discomfort. Systemic toxicity is not expected.			
11.2 Information on other hazards					
11.2.1. Endocrine disrupting properties		Based on the available data and according to the criteria laid down in Commission Regulation (EU) 2017/2100 and Regulation (EU) 2018/605, the substance is not identified as having endocrine-disrupting properties with respect to human health.			
11.2.2. Other information		No other adverse health effects have been identified.			

12. ECOLOGICAL INFORMATION

12.1 Toxicity:

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 14 of 17
------------------	--------------	-----------------------	---------------

Based on available data, the substance is not classified as hazardous to the environment according to the criteria of Regulation (EC) No 1272/2008 (CLP). The slags are not expected to pose any danger to the aquatic or terrestrial environment in the short or long term. In light of the product's structure and results from leaching tests, the risk of damage to the environment is unlikely. Depending on the nature of the land, hydrological conditions, etc. c. in case of major construction work with the product, it cannot be ruled out that it leads to initial and temporary pH increases in the environment, such as e.g. in nearby wells or in small bodies of water with low flow. The substance is not expected to have any negative effects on sewage treatment plants. Key supporting data are provided below.

Chemical name	Aquatic toxicity	Effect dose	Exposure time	Species	Method (as is, equivalent or similar)
	Acute toxicity to fish	LC ₅₀ (96 h) > 100 g/L	96 h	<i>Leuciscus idus</i>	OECD Guideline 203
	Long-term toxicity to fish	NOEC = ca. 500 g/L	6 mo	<i>Clupea harengus</i>	Field study, 10 sampling stations
	Acute toxicity to aquatic invertebrates	EC ₅₀ > 100 g/L	48 h	<i>Daphnia magna</i>	OECD Guideline 202
	Long-term toxicity to aquatic invertebrates	NOEC ≥ 5000 mg/L	21 d	<i>Daphnia magna</i>	EU Method C.20
	Toxicity to aquatic algae and cyanobacteria	IC ₅₀ > 100 g/L	72 h	<i>Desmodesmus subspicatus</i>	OECD Guideline 201
	Toxicity to microorganisms	EC ₅₀ > 10 g/L	3 h	activated sludge	OECD Guideline 20

12.2 Persistence and degradability

Abiotic Degradation

Photolysis not applicable to inorganic substances. Slags are practically insoluble in water, so no hydrolysis takes place. An estimated half-life in water and in soil is about 1000 years at 20 °C.

Biodegradation

Ferrous slags are inorganic UVCB similar to natural rock, and biodegradation is of no relevance.

12.3 Bioaccumulative potential

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 15 of 17
-------------------------	---------------------	------------------------------	----------------------

Ferrous slags are inorganic UVCB similar to natural rock. These materials contain trace elements of toxicological or environmental relevance. The accumulation of these elements was tested in field studies. For several elements tested, there was a high scattering of their concentrations in animals and algae, but it could not be shown that a significant accumulation of these trace elements occurred.
12.4 Mobility in soil The substance is a solid, chemically inert and poorly soluble. Due to its low solubility and particulate nature, it is not expected to exhibit significant mobility in soil. Ferrous slags contain tightly bound heavy metals with low solubility, resulting in high Kd values for the distribution of these metals between the solid and liquid phases. Therefore, the potential for leaching into groundwater is considered negligible.
12.5 Results of PBT and vPvB assessment Not applicable for inorganic substances.
12.6 Endocrine disrupting properties Based on available information and in accordance with the criteria set out in Regulations (EU) 2017/2100 and 2018/605, the substance is not identified as having endocrine disrupting properties relevant to the environment.
12.7 Other adverse effects No other adverse environmental effects have been identified.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods	
13.1.1. Waste type (Commission Regulation (EU) No 1357/2014)	The substance is not classified as hazardous waste under Regulation (EU) No 1357/2014.
13.1.2. Recommended disposal methods	Slags should preferably be recycled. Recycling is possible without special treatment. If recycling is not feasible, the material may be disposed of in accordance with European and/or local regulations, including at household or inert waste landfill sites.
13.1.3. Waste codes / waste designations according to EWC	Suggested waste code: EWC-Code: 10 02 01 – wastes from the processing of slag. <i>Final assignment must be made by the waste generator, considering actual use and contamination.</i>
13.1.4. Packaging	Well-cleaned packaging can be handled in the recycling stage for each type of material.
13.1.5 Sewage disposal	Do not discharge into sewage systems or water bodies. Prevent entry into drains or soil.

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 16 of 17
------------------	--------------	-----------------------	---------------

14. TRANSPORT INFORMATION

	ADR/RID	IMDG	ICAO/IATA
14.1 UN number or ID number	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name	Not regulated	Not regulated	Not regulated
14.3 Transport hazard class(es)	Not classified	Not classified	Not classified
14.4. Packing group	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards	No (not hazardous to the aquatic environment)	Not a marine pollutant	No (not hazardous to the aquatic environment)
14.6. Special precautions for user	None	None	None
14.7 Maritime transport in bulk according to IMO instruments	Bulk Cargo Shipping Name, BCSN: GRANULATED SLAG Class: Not Applicable Group: C Size: Up to 5 mm		

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance
Regulation (EC) No 1907/2006 (REACH) Directive 2008/98/EC of the European Parliament and of the Council on waste National legislation is to be considered.
15.2 Chemical Safety Assessment
A chemical safety assessment has been carried out.

16. OTHER INFORMATION

16.1 Indication of changes
The SDS has been issued for the first time.
16.2 Abbreviations and acronyms
PBT – Persistent, Bioaccumulative and Toxic substance. vPvB – Very Persistent and Very Bioaccumulative substance. ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road. IMDG – International Maritime Dangerous Goods Code. IATA – International Air Transport Association. ICAO – International Civil Aviation Organization. Log Pow – Logarithm of the octanol/water partition coefficient.

Granulated blast furnace slag (GBS) Air cooled blast furnace slag (ABS)

Date: 20.04.2025	Version: 1.0	Supersedes version: -	Page 17 of 17
-------------------------	---------------------	------------------------------	----------------------

LD₅₀ – Median lethal dose for 50% of the test population.
 LC₅₀ – Median lethal concentration for 50% of the test population.
 EC₅₀ / EC₁₀ – Effective concentration at which 50% / 10% of test organisms exhibit a defined effect.
 IC₅₀ – Inhibitory Concentration 50%, refers to the concentration of a substance that causes a 50% inhibition of growth or activity in a specific biological system under defined test conditions.
 NOAEL – No Observed Adverse Effect Level.
 DNEL – Derived No-Effect Level.
 PNEC – Predicted No-Effect Concentration.

16.3 Key literature references and sources for data

ECHA database of registered substances
 ECHA Classification and Labelling Inventory
 GESTIS international limit values database
 GESTIS Substance Database
 PubChem – open chemistry database of the U.S. National Institutes of Health
 AFS 2018:1. Hygieniska gränsvärden. Arbetsmiljöverkets föreskrifter och allmänna råd.
 Swedish Work Environment Authority, 2018.
 TRGS 900 – Arbeitsplatzgrenzwerte, Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA), Germany.
 Finnish Institute of Occupational Health (HTP values) – Occupational exposure limit values.
 Danish Working Environment Authority (Arbejdstilsynet) – Grænseværdier for stoffer og materialer.

16.4 Relevant H-statements (number and full text)

None

16.5 Training advice

General training: The employer must inform affected employees about the health and accident risks with dangerous chemical substances and any hygienic limit values that occur in the workplace, and about how these risks are avoided. The employer must make sure that affected workers understand the information.
 Special training: No special training is necessary for this product.

16.6 Further information

The information provided in this Safety Data Sheet is based on current knowledge, available sources, and applicable European and national legislation. While it reflects the best knowledge available at the time of compilation, no warranty is given regarding its completeness or accuracy. The Safety Data Sheet does not constitute a guarantee of specific product properties and is intended solely to describe the safety requirements.
 As the conditions of handling, storage, use, and disposal are beyond the supplier's control, the user remains solely responsible for compliance with applicable laws and regulations related to the safe handling of the substance.
 This information applies only to the product identified and must not be used for any other substance or mixture, even if similar in composition or use.