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|  | MATERIAL SAFETY DATA SHEET FOR NUH CEMENT PRODUCTS (Prepared in accordance with 1907/2006/EC and the Regulation on Safety Data Sheets Regarding Hazardous Substances and Mixtures (13/12/2014-29204).) | Date of issue | |
| | | 06.05.2021 | |
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1. PRODUCT AND COMPANY INFORMATION

1.1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE

Product Information : Ground Granulated Blast Furnace Slag (EN 15167 - 1)

Product Identifiers : Slag, Ferrous Metal, Blast Furnace (Granulated)

1.2. USE OF THE SUBSTANCE/MIXTURE


Constituent of standard cement (EN 197-1) and special binders, concrete preparation, road construction.

1.3. COMPANY IDENTIFICATION

Manufacturer' s Name : NUH ÇİMENTO SANAYİ A.Ş.
 Address : Akyar Mevkii Hereke 41800 Kocaeli – Turkey
 Internet Address : www.nuhcimento.com.tr

1.4. EMERGENCY TELEPHONE

(Also available outside office hours)
 Telephone Number for Emergency : 00 90 262 316 20 00
 National Poison Solidarity Center : 114

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2. HAZARD IDENTIFICATION

Classification of The Substance or Mixture: This substance does not meet the requirements for classification as dangerous under both the EU Dangerous Substances (67/548/EEC) Directive and secondly according to the Classification, Labelling and Packaging of Substances and mixtures (CLP) regulations (EC 1272/2008).

Others Hazards: Dust of granulated slag can act as an irritant and cause mechanical irritation to the eyes and respiration system.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Substance Related Information | CAS-No | EINECS | REACH Registration Number |
|-------------------------------------|------------|-----------|---------------------------|
| Slags, Ferrous metal, Blast furnace | 65996-69-2 | 266-002-0 | 01-2119487456-25 |

GGBS consists principally of the oxides of calcium, silicon, aluminium and magnesium with low solubility in water giving a weak alkaline solution. The fineness is approximately 450m²/kg.

4. FIRST AID MEASURES

When contacting a physician, take this MSDS with you.

Eye Contact :Rinse the eyes with water with the eyelids open. Seek medical advice if irritation persists.

Skin Contact :Wash with soap and water.

Inhalation :Move affected person into fresh air.


Ingestion :Rinse mouth and drink plenty of water.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Product itself does not burn. Coordinate fire-fighting measures with surrounding.

Special Hazards Arising From The Substance or Mixture: None.

Advice for Fire-Fighters: Not applicable.

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6. ACCIDENTAL RELEASE MEASURES

Personel Protective Measures : Avoid dust dispersion.

Environmental Protection Measures : Not necessary.

Methods for Cleaning up : Pick up mechanically, avoid disturbing dust. Use dust reducing cleaning method.

7. HANDLING AND STORAGE

Precautions for Safe Handling :


- **Advices on Safe Handling** : Avoid dust dispersion. Where applicable keep dust wet. In closed areas provide adequate ventilation to prevent dust inhalation.
- **Technical Measures**: In case of further handling with foreseeable high dust dispersion, use for example an exhaust with filter or a closed system.
- **Advice on General Occupational Hygiene**: Do not eat, drink, smoke or take snuff while working. Wash hands before breaks and after work.

Conditions for Safe Storage, Including any Incompatibilities: None.

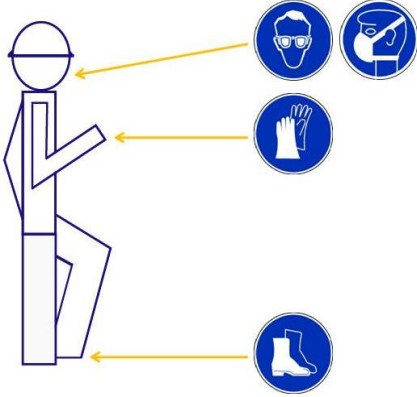
8 .EXPOSURE CONTROLS AND PERSONEL PROTECTION

Control Parameters

| Occupational Exposure Limits: | | | Limit Value – Short Term ml/m ³ mg/m ³ |
|-------------------------------|------------------|--|---|
| CAS-No. | Name | Limit Value - 8 h ml/m ³ mg/m ³ | |
| | Dust, respirable | 3 | 6 |
| | Dust, inhalable | 10 | 20 |

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Exposure controls:



Respiratory Protection : In case of high dust concentration : EN 149 FFP2 filter.

Hand Protection : Check the resistance to chemicals of the protective gloves together with the supplier of the gloves. Use only gloves conform to 89/686/EEC. Wear duration at permanent or occasional contact: gloves made of fabric coated with nitrile rubber Breakthrough time (maximal wear duration): >480 min.

Skin Protection : Protective clothing should be worn which ensures that GGBS/water mixture eg, concrete or mortar, does not come into contact with the skin. In some circumstances such as when laying concrete, waterproof trousers and Wellingtons may be necessary. Particular care should be taken ensure that wet concrete does not enter the boots and persons do not kneel on the wet concrete get inside boots, gloves or other protective clothing then this should be immediately removed and the skin thoroughly washed as well as the protective clothing/footwear.

Eye Protection : At appearance of dust : safety glasses.

9 .PHYSICAL AND CHEMICAL PROPERTIES


Information on Basic Physical and Chemical Properties

- : Appearance: Off-white powder
- : Average particle size: <45 micron.
- : Odour: Odourless
- : pH: 10-12
- : Water solubility: <100 mg/L
- : Flash point: Non-flammable
- : Flammability: Non-flammable
- : Melting point: >1000°C
- : Explosive properties: None.
- : Oxidising properties: None.

Contains less than 1% crystalline silica
 Contains less than 1 ppm water-soluble Chromium VI

Other Information

None applicable.

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10. STABILITY AND REACTIVITY

Conditions to avoid : None.

Materials to avoid : None.

Hazardous : None.

11. TOXICOLOGICAL INFORMATION

The substance is not classified as dangerous. Details of the toxicological tests submitted as part of the REACH dossier for this substance are available on the European Chemicals Agency website.

12. ECOLOGICAL INFORMATION

In large of quantities, the addition of GGBS to water will cause the pH to rise and may reduce oxygen availability, which might be toxic to aquatic life in some circumstances.

13. DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods: Granulated blast furnace slag can be recovered after spillage. In the case there is no further use, the slag can be disposed following local legislation.

13.2. List of Proposed Waste Codes/Waste Designation in Accordance with AVV(or EWC) : Waste classification due to trade and processing. Disposal is possible as follows:
EWC-Code:10 02 01 :Waste from the processing of slags.

14. TRANSPORT INFORMATION

GGBS is not covered by the international regulations on the transport of dangerous goods (IMDG, ADR/RID) and no classification is required.


15. REGULATORY INFORMATION

15.1. Safety, Health and Environmental Regulations/Legislation Specific for The Substance or Mixture

15.1.1 EU Law: None.

15.1.2. National Law: See national legislation!

15.2. Chemical Safety Assessment: Not necessary.

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16. OTHER INFORMATION

Training Instructions: None.

Recommended Restrictions on Use: None.

Further Information: Revision date 12/06/2018

Abbreviations

- **IMDG** :International Maritime Dangerous Goods
- **IATA** :International Air Transport Association
- **ADR/RID**:Agreement on the transport of dangerous goods by road/Regulations on the international transport of dangerous goods by rail.
- **GGBS** :Ground Granulated Blast Furnace Slag
- **EWC** :European Waste Catalogue
- **REACH** :Registration, Evaluation and Authorisation of Chemicals

MSDS prepared by: Asuman KÜÇÜK
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Document No: 01.274.04

Information about revision of SDS

The information on this data sheet reflects the currently available knowledge and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product, including the use of the product in combination with any other product or any other process, is the responsibility of the user. It is implicit that the user is responsible for determining appropriate safety measures and for applying the legislation covering his own activities.