SAFETY DATA SHEET

DRY CEMENT CONCRETES

In accordance with the Regulations (CE) nº 1907/2006 (REACH)

Edition 2. Revision 02-03/10/2022

1. Identification of the mixture and the company or company.

1.1. Product Identifier.

Product Name

DRY CEMENT CONCRETES

"HNE-10" "HNE-15", "HNE-20", "HA-25", "HA-25_ WHITE", "HA-25_8mm", "HA-25/AC", "HA-30", "HLE-20", "HLE-25", "FAST&EASY", "HA25/8mm – hidrosoluble bag",

1.2. Identified relevant uses of the mixture and discouraged uses.

Prepared in the factory with raw materials in accordance with the provisions of the UNE-EN 206:2013+A1 standard and the Instruction for Structural Concrete -EHE-08 (Royal Decree 1247/2008) duly certified with respect to the applicable regulations and, where appropriate, in CE conformity, bagged in a dry state so that the user, adding water in the indicated proportion and kneading it, Get a concrete of adequate and consistent quality for general construction work.

1.3. Data from the safety data sheet provider.

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1.4. Emergency telephone.

National Institute of Toxicology: +34 915 62 04 20

2. Hazard identification.

2.1. Classification.

Skin Irritation, Category 2 (H315). Serious eye injuries, Category 1 (Eye Dam. 1, H318). Respiratory Tract Irritation, Category 2 (Skin Irrit. 2, H335)

2.2. Label Elements.

Regulation (CE) n o 1272/2008

Pictograms:	GHS05 Corrosion Attention
Phrases H:	H318: It causes serious eye injuries. H315: Causes skin irritation H335: May irritate the airways





Phrases P:

Precautionary Advice-Prevention:

- P261: Avoid breathing dust/smoke/gas/mist/vapors/aerosol.
- P264: Wash hands thoroughly after handling
- P271: Use only outdoors or in a well-ventilated place.
- P280: Wear protective gloves/clothing/goggles/mask.

Precautionary Advice-Answer:

- P302+P352: IN CASE OF CONTACT WITH SKIN: Wash with plenty of soap and water
- P332+P313: IN CASE OF SKIN IRRITATION: consult a doctor
- P362+P364: Remove contaminated garments and wash them before using them again.
- P305+P351+P338 + P310: IN CASE OF CONTACT WITH EYES: Rinse carefully with water for several minutes.
 Remove contact lenses, if you have one, and it's easy. Keep clarifying. If the eye irritation: Call a POISON CENTER or doctor immediately.
- P304+P340+ P312: IN CASE OF INHALATION: Transport the victim outside and keep him at rest in a comfortable position to breathe. Call a poison control center or doctor at case of discomfort.

Precautionary Advice-Storage:

- P403+P233: Store in a well-ventilated place. Keep the container tightly closed.
- P501: Dispose of the contents or container in accordance with local, regional, national, or international regulations.

2.3. Other

Hazards

Not relevant

Environment

Concrete does not pose a particular risk to the environment, provided that the considerations in paragraphs 12 and 13 of Ecological Information and Disposal Considerations are respected.

Additional information:

The marketed product is poor in chromates per se or due to the reduction of its content in water-soluble Chromium VI.

3. Composition / Component Information

3.1. Composition.

Mixture of cements, aggregates and additives.

3.2. Hazardous components:

Component	Nº CAS	Nº EINECS	Concentration %	Danger symbol	Phrases H
Cement	65997-15-1	266-043-4	< 26	GHS05, GHS07	H318, H315, H335

4. First Aid.

4.1. Description of First Aid.

<u>Inhalation</u>	Moving the source of contamination or moving the victim to a place with fresh air. Get medical advice immediately.
Skin contact	If there is irritation, clean the affected area with a jet of warm water, let the water run gently for at least 10 minutes. If irritation persists, get medical advice immediately.
Eye contact	Immediately clean the contaminated eye(s) with a stream of warm water, let the water run gently for 10 minutes keeping the eyelid(s) open. If irritation persists, get medical advice immediately.
Ingestion	Never give anything through the mouth, if the victim is losing consciousness, or is unconscious or convulsed. Rinse your mouth thoroughly. DO NOT INDUCE VOMITING. Give the victim 240 to 300 ml of water to drink to dilute the material in the stomach. Get medical advice immediately.

Provide general support measures (warmth, comfort and rest). If the situation worsens, transfer the patient to the nearest poison control center.

4.2. Main symptoms and effects, acute and delayed.

No symptoms or delayed effects

4.3 Indication of any medical care and special treatments to be given immediately.

Not relevant.



5. Firefighting measures

5.1. Means of extinguishing.

Non-flammable product under normal conditions of storage, handling and use. In the event of ignition as a result of improper handling, storage or use, preferably use multipurpose powder extinguishers (ABC powder), in accordance with the Regulation on Fire Protection Installations (R.D. 1942/1993 and subsequent amendments).

It is NOT RECOMMENDED to use jet water as an extinguishing agent.

5.2. Specific hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition, reaction by-products (CO2, CO, NOx...) are generated that can be highly toxic and, consequently, can present a high risk to health.

5.3. Recommendations for firefighting personnel.

Depending on the magnitude of the fire, it may be necessary to wear full protective clothing and self-contained breathing equipment. Have a minimum of emergency installations or action elements (fireproof blankets, portable first aid kit...) in accordance with R.D.486/1997 and subsequent modifications.

5.4. Additional provisions.

Act in accordance with the Internal Emergency Plan and the Information Sheets on action in the event of accidents and other emergencies. Suppress any source of ignition. In the event of fire, refrigerate containers and storage tanks for products susceptible to ignition, explosion or BLEVE as a result of high temperatures. Avoid the spillage of the products used in extinguishing the fire into the aquatic environment.

6. Measures in the event of accidental spillage.

6.1. Personal precautions, protective equipment, and emergency procedures.

Avoid breathing dust. Use respiratory protection in poorly ventilated places.

Avoid contact with eyes and skin. Wear eye protection goggles, appropriate work clothes and waterproof safety gloves.

6.2. Environmental precautions.

Avoid contamination of drains, surface water, and groundwater.

6.3. Containment and cleaning methods and

material. Collect by mechanical means avoiding the

formation of dust. Clean the stained area with plenty of water.

Dispose of recovered waste in accordance with current local regulations.

After setting, the product can be evacuated as inert waste.

6.4. Reference to other sections.

See sections 8 and 13.

7. Handling and storage.

7.1. Precautions for safe handling.

The supply of this material is carried out in paper, plastic or bulk bags.

In the premises where the product is handled, good ventilation must be guaranteed.

Avoid dust clouds during handling. If it is unavoidable, wear approved goggles and dust mask.

Avoid contact with skin and eyes.

7.2. Safe storage conditions, including possible incompatibilities.

Keep the container tightly closed and protected from exposure to air and moisture. Store in a dry and cool place away from the normal work area and incompatible materials.

Burial hazard: to prevent the risk of burial or suffocation, do not enter confined spaces such as silos, containers, vats or other containers that are used for storage or contain concrete without taking appropriate safety measures. Concrete can accumulate or adhere to the walls of confined spaces and can come loose.

7.3. Specific end uses.

In concretes treated with Chromium VI reducing agent, the effectiveness of the reducing agent decreases over time. Therefore, bags and packing slips must include information on the period of efficacy (expiry date, half-life) that the manufacturer guarantees that the reducing agent will continue to maintain the level of Chromium VI below the regulatory limit of water-soluble Chromium VI. In addition, appropriate storage conditions should be indicated to maintain the effectiveness of the reducing agent.





8. Exposure/personal protection controls.

8.1. Control parameters

Substances included in the "Occupational Exposure List for Chemical Agents in Spain" of the INSHT:

Substance	N. CAS	Nº EINECS	Туре	Limit value
Porland Cement	65997-15-1	266-043-4	VLA-ED Respirable fraction (8 hours)	4 mg/m3

8.2. Exposure controls.

General:

During work, whenever possible, avoid kneeling in concrete or fresh mortar. If it is absolutely necessary to kneel in order to carry out the work, then the use of waterproof personal protective equipment (waterproof knee pads) is mandatory. Do not eat, drink or smoke while carrying out concrete work to prevent it from coming into contact with the skin or mouth.

Once the concrete work is finished, workers must wash, shower and it is advisable to use moisturizing creams. Remove any stained clothing (clothing, footwear, watches, etc.) and clean it before using it again.

Respiratory protection:

Use an approved breathing guard to avoid the discomfort of dust. Limitations on the use of the breathing shield are specified by the certifyin agency and the manufacturer.

Eye protection:

To avoid the risk of dust and projections on the eyes, it is necessary to wear safety glasses

Skin protection:

Waterproof gloves, body protectors, etc. will necessarily have to be worn.

Environmental exposure control:

According to the available technology.

9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance:	Granulate and powder
Smell:	Odorless
PH in aqueous solution:	11-13
Bulk density:	1,6-2 g/cm3.
Solubility in water:	The product is partially soluble.
Boiling Point:	Not applicable.
Flash Point:	Not applicable.
Melting Point:	> 1000°C.
Auto-ignition time:	Not applicable
Decomposition Time:	Not applicable

10. Stability and reactivity

10.1. Reactivity.

Hazardous reactions are not expected if the technical instructions for chemical storage are followed. See section 7.

10.2. Chemical stability.

Stable in dry storage conditions and once set.



10.3. Possibility of dangerous reactions.

Under the above conditions, no dangerous reactions are expected that may produce excessive pressure or temperatures.

10.4. Conditions to be avoided.

Exposure to moisture prior to application may result in product hardening.

10.5. Incompatible materials.

Strong acids

10.6. Hazardous Breakdown Products

Not known



11. Toxicological information

11.1. Information on toxicological effects.

No experimental data is available on the mixture itself relating to toxicological properties. When classifying the hazard of corrosive or irritating effects, the recommendations contained in section 3.2.5 of Annex VI of R.D.363/1995 (Directive 67/548/EC), in paragraphs b) and c) of paragraph 3 of article 6 of R.D.255/2003 (Directive 1999/45/EC) and in section 3.2.3.3.5. of Annex I of the CLP Regulation.

Dangerous health effects:

In the event of repetitive, prolonged exposure or to concentrations higher than those established by occupational exposure limits, adverse health effects may occur depending on the route of exposure:

Inhalation:	It can irritate the respiratory system. The symptoms are: sneezing and slight nasal irritation.
Skin contact:	It can cause irritation and caustic burns.
Eye contact:	Mild irritation. Symptoms are tearing and irritation.
Ingestion:	If swallowed, it can cause irritation of the digestive tract and abdominal pain.

Acute effects:

Eye contact:	Direct contact with concrete can cause damage to the cornea due to mechanical stress, irritation and immediate or delayed inflammation. Contact with large quantities of concrete (dust or splashes of fresh paste) can produce keratoplasties of different considerations.
Skin contact:	Concrete can irritate wet skin because cement pastes have a high pH. Unprotected skin contact with concrete pastes can lead to dermis injuries such as cracking or caustic burns without any previous symptoms.
Acute dermal toxicity:	Test parameters, rabbit, 24 hours of contact, 2,000 mg/kg body weight - no mortality.
Ingestion:	In case of significant ingestion, concrete can cause irritation and pains in the digestive tract.
Inhalation:	Concrete can cause irritation of the throat and respiratory tract. Exposures to concentrations above the occupational exposure limit values may cause coughing, sneezing and shortness of breath.

Chronic effects:

Inhalation:	Chronic exposure to respirable dust concentrations above occupational exposure limit values can lead to coughing, shortness of breath and chronic obstructive pulmonary disease (COPD).
Carcinogenicity:	No causal relationship has been established between exposure to concrete and the development of cancer.
Contact dermatitis / Sensitizing effects:	Some individuals exposed to fresh concrete paste may develop eczema, caused either by the high pH inducing contact dermatitis or by an immunological reaction to Chromium VI that causes allergic contact dermatitis. The provoked reaction is a combination of these two mechanisms and its effects can range from a mild rash to a severe dermatitis. It is often difficult to make an accurate diagnosis. In concretes containing Chromium VI reducing agent, as long as their manufacturer-guaranteed efficacy period (periods indicated on the bag or delivery note) is not exceeded, it is not likely that any sensitizing effect will develop.

Aggravation of previous illnesses due to exposure:

Breathing in mortar dust can aggravate the symptoms of previously diagnosed diseases such as respiratory pathologies, emphysema, asthma, eye pathologies and skin pathologies.





12. Ecological information

No experimental data are available on the mixture itself regarding ecotoxicological properties. There are no known negative effects on the environment once the product has set.

Setting material is a stable material that fixes its compounds and makes them insoluble.

Dumping the product into the water can cause an increase in pH.

No biodegradable.

12.1. Toxicity.

Not determined

12.2. Persistence and degradability.

Not determined

12.3. Bioaccumulation potential.

Not determined

12.4. Mobility on the ground.

Not described

12.5. Results of the PBT and vPvB assessment.

No applicable

12.6. Other side effects.

Not applicable

13. Disposal considerations

13.1. Methods for waste treatment.

Product

Following the local regulations in force as construction waste.

Do not discharge it into sewers or waterways.

Containers and packaging:

Empty containers and packaging can be recycled.

Containers and packaging with product must be disposed of in the same way as the product.

14. Transport information

Non-dangerous goods.

Not subject to transport classification and labelling.

15. Regulatory Information.

15.1 Safety, health and environmental legislation and regulations specific to blending.

Candidate substances for authorization in Regulation (EC) 1907/2006 (REACH): Not relevant

Regulation (EC) 1005/2009 on substances that deplete the ozone layer: Not relevant

Active substances which have not been included in Annex I or IA of Directive 98/8/EC: Not relevant

Regulation (EC) 689/2008 on the export and import of hazardous chemicals: Not relevant

Regulation (EC) 689/2008 on the export and import of hazardous chemicals: Not relevant

15.2 Regulation (EC) 689/2008 on the export and import of hazardous chemicals: Not relevant

It is recommended that the information collected in this safety data sheet be used as input data in a risk assessment of local circumstances in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

15.3 Chemical safety assessment.

The supplier has not carried out a chemical safety assessment.





16. Other information.

Modifications with respect to the previous safety data sheet that affect risk management measures:

The trademark HA25/8mm - Water-soluble bag is included within the scope of this safety data sheet.

Advice regarding training: Minimum training in occupational risk prevention is recommended for personnel who are going to handle this product, in order to facilitate the understanding and interpretation of this safety data sheet, as well as the labelling of the product.

Full H-phrases from section 3:

H318: Causes serious eye injuries.

H315: Causes skin irritation

H335: May irritate the airways

The information in this Product Safety Data Sheet is based on current knowledge and current EC and national laws, as the working conditions of users are beyond our knowledge and control. The product must not be used for purposes other than those specified, without first having a written instruction for its operation. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established in the legislation.



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