

SAFETY DATA SHEET

BIKGUN

In accordance with Regulation REACH 1907/2006/CE and 453/2010/CE.

1. Identification of the mixture and the company

1.1. Product identification

Nomenclature: BIKGUN range

1.2. Relevant identified uses of the substance or mixture and uses advised against.

Relevant uses: Strengthening shotcrete for spraying in tunnels and slopes. Exclusively for professional use.

Uses advised against: Any use not specified under this heading.

1.3. Information about the supplier from the safety data sheet

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1.4. Emergency telephone:

Toxicological Information Service: +34 91 562 04 20

2. Identification of hazards

2.1. Classification of the mixture:

In accordance with Regulation (CE) no. 1272/2008:

Skin irritation, category 2

Eye injury/irritation, category 1

Skin sensitizer, category 1

STOT SE respiratory tract irritation, category 3

2.2. Listed on the tag



Hazard

Hazard indications:

H315 Causes skin irritation

H317 May cause an allergic reaction on the skin

H318 Causes serious eye injury

H335 May irritate the respiratory tract

Precautionary statements:

P102 Keep out of the reach of children

P261 Avoid breathing the dust.

P280 Wear protective gloves/clothing/goggles/mask.

P302+P352 In case of contact with the skin: wash the affected area with abundant soap and water.

P305+P351+P338 In case of contact with the eyes: carefully flush eyes with water for several minutes. Remove contact lenses if you are wearing them and they are easy to remove. Continue flushing.

P310 Immediately call a poison control centre or a doctor.

P501 Dispose of the contents/container at the proper waste management point.

Compounds that contribute to the classification:

Portland Cement

Other information:

The mortar has a low chromate content "per se" or due to the lower content of water soluble Chrome VI.

2.3. Other hazards:

Not relevant

3. Composition/information about the components

Composition: Mixture of cements, sands and additives

Hazardous components:

Component	Concentration %	Classification
Portland Cement CAS: 65997-15-1; CE: 266-043-4	m40	Eye Dam. 1: H318 Skin Irrit. 2: H315 Skin Sens. 1: H317 STOT SE 3: H335

Refer to section 16 for more information about sentences H above.

4. First Aid

4.1. Description of the first aid:

In case of inhalation:

Move the victim to a well ventilated area.

In case of contact with the skin:

Powder: Brush and wash skin with soap and water.

Paste: Remove contaminated clothing. Wash skin with soap and water.

In case of contact with the eyes:

Do not rub eyes. Flush eyes immediately with abundant water for at least 15 minutes while keeping the eyes open. Remove contact lenses if they can be easily removed. See an eye doctor.

In case of ingestion:

Do not induce vomiting. Rinse mouth with abundant water. Drink water or milk. Immediately call a doctor or a Poison Control Centre.

4.2. Main symptoms and effects, both acute and delayed:

Prolonged exposure of moist and improperly protected skin to powder may cause irritation or contact dermatitis.

Prolonged contact with the moist mixture and without the proper protection may cause serious burns (alkaline burns).

Inhalation of the product will cause irritation of the respiratory tracts.

4.3. Medical attention and special care that must be immediately given.

When a doctor is contacted, ensure you have this safety data sheet with you.

5. Fire fighting measures

5.1. Fire extinguishing procedures:

If the mortar catches fire, any extinguishing agent may be used.

5.2. Specific hazards derived from the compound or mixture:

Mortar is not flammable or explosive and it does not aid or feed the combustion of other materials.

5.3. Recommendations for personnel fighting the fire:

Use extinguishing agents that are suitable for the local circumstances and the surrounding environment.

6. Measures to be taken in case of accidental spill

6.1. Personal precautions, protective equipment and emergency procedures:

Wear the protective equipment described in section 8.

Follow the handling instructions described in section 7.

Respiratory protection shall be used in situations where there is a high concentration of powder in the air or in poor ventilated areas.

6.2. Precautions to be taken regarding the environment:

Avoid it from going down sewers, drains or surface waters.

6.3. Methods and materials for containment and clean up.

Clean up using mechanical methods is recommended to prevent powder from becoming airborne.

Place the collected material in containers prior to reuse if possible, or dispose of it as described in section 13.

6.4. References and other sections:

Refer to sections 8 and 13.

7. Handling and Storage

7.1. Precautions for safe handling:

Use in well ventilated areas.

Prevent powder from becoming airborne.

Do not eat, drink or smoke in the working areas.

Wash hands and other exposed areas of the body prior to eating and when leaving the working area.

Remove contaminated protective clothing and equipment prior to entering the eating area.

Protective measures:

Follow the instructions in section 8.

Fire prevention measures:

The product is not flammable under normal storage, handling and usage conditions.

7.2. Safe storage conditions, including possible incompatibilities:

The packaged mortar must be stored in closed sacks, under cover in a location that is cool, dry and protected from exposure to air and humidity.

The silos that supply the mortar in bulk must be placed over a stable and sufficiently resistant base.

To prevent the risk of burial or suffocation, do not enter confined spaces such as silos, tanks or other containers used for storing or containing mortar without first implementing the appropriate safety measures. The mortar may accumulate or adhere to the walls of the confined spaces and may become loose, collapse or fall unexpectedly.

7.3. Specific end uses:

The recommendations listed in this safety data sheet refer to using the product as indicated in section 1.2.

8. Personal exposure/protection controls

8.1. Control parameters:

Compounds included in the "Professional Exposure List for Chemical Agents in Spain" of the INSHT (National Institute for Occupational Safety and Health):

Nomenclature:	Type:	Limit Value
Portland Cement CAS: 65997-15-1 CE: 266-043-4	VLA-ED Respirable fraction	4 mg/m ³

DNEL and PNEC control parameters:

Not available

8.2. Exposure control:

General personal protective measures:

During work, whenever possible, avoid kneeling on fresh product. If absolutely necessary, the use of impermeable knee pads shall be required.

Do not eat, drink or smoke while using the product to prevent the product from coming in contact with the skin or mouth.

Once the work with the product has been completed, wash hands and other exposed areas of the body.

Remove stained clothing (shoes, etc.) and wash prior to using them again.

Eye/face protection:



When moist or dry Portland cement powder is handled, use approved or certified protective goggles.

Skin protection:



Use impermeable gloves that are resistant to abrasions and alkalis, boots, protective long sleeves as well as skin care products (including protective ointments) to protect the skin against prolonged contact with the moist mortar.



Special care shall be exercised to prevent the powder from entering the safety shoes.

Under some circumstances, use of impermeable pants or knee pads shall be required.

Respiratory protection:



When a person potentially becomes exposed to powder concentrations above the allowed limits, suitable respiratory protection should be used. The type of respiratory protection must be suitable for the concentration of particles that are present and compliant with the standards set by the harmonized UNE Regulation (e.g. UNE EN149, UNE EN 140, UNE EN 14387, UNE EN 1827 or other national standards).

Thermal hazards:

Not applicable.

Environmental exposure controls:

The control for preventing the dispersion of mortar particles during use must be carried out in accordance with the available technology and legislation regarding environmental protection.

9. Physical and chemical properties

9.1. Information about the basic physical and chemical properties:

Appearance: Solid powdery material

Colour: grey or white / diverse

Odour: odourless

Odour threshold: not applicable

Melting point: > 1,000°C

PH (T° = 20°C, in an aqueous solution): 11-13

Boiling point: not applicable

Evaporation rate: not applicable

Flammability: not flammable

Flammability or explosion limit: not applicable

Flash point: not applicable

Vapour pressure: not applicable

Vapour density: not applicable

Apparent density: approximately 1.4 g/cm³

Solubility: slightly soluble in water

Partition coefficient (n-octanol/water): not applicable

Self-igniting temperature: not applicable

Decomposition temperature: not applicable

Viscosity: not applicable

Explosive properties: not explosive

Oxidising properties: does not cause or facilitate combustion of other substances.

10. Stability and Reactivity

10.1. Reactivity:

The product is stable under normal storage, handling and usage conditions.

10.2. Chemical stability:

The product is stable under normal storage, handling and usage conditions.

10.3. Possibility of hazardous reactions:

No hazardous reactions occur under normal storage and usage conditions.

10.4. Conditions that must be avoided:

Exposure to humidity may cause the product to harden.

10.5. Incompatible materials:

Since it contains cement, it is not compatible with: acids, ammonium salts, aluminium or other noble materials.

10.6. Dangerous decomposition products:

None known.

11. Toxicological information

11.1. Information regarding toxicological effects:

No experimental data is available about the mixture itself, regarding the toxicological properties. The available information regarding the main substances that are present in the mixture is the following:

Acute dermal toxicity:

Rabbit . contact for 24h . 2,000mg/kg of body weight . not lethal.

Acute inhalation toxicity:

In accordance with the available data, does not meet the classification criteria.

Acute ingestion toxicity:

In accordance with the available data, does not meet the classification criteria.

Contact with eyes:

Direct contact with mortar may cause eye irritation and serious eye injury.

Contact with the skin:

Contact of mortar paste with unprotected skin may cause irritation and cracking of the skin.

Skin sensitivity:

Prolonged contact may cause allergic contact dermatitis.

Respiratory sensitivity:

Breathing mortar powder may aggravate previously diagnosed chronic respiratory pathologies such as emphysema or asthma.

CMR (carcinogenic, mutagenic, reprotoxic) effects:

In accordance with the available data, does not meet the classification criteria.

Specific target organ toxicity (STOT) - single exposure.

Mortar may cause irritation of the throat and the respiratory tract.

Specific target organ toxicity (STOT) - repeat exposures.

Chronic exposure to respirable powder concentrations exceeding the professional exposure limit may cause chronic obstructive pulmonary diseases (COPD).

12. Ecological information

12.1. Toxicity:

Not determined

12.2. Persistence and degradability:

Not applicable

12.3. bio-accumulative potential:

Not applicable

12.4. Mobility on the floor:

Not applicable

12.5. Results of the PBT and vPvB assessment:

Not applicable

12.6. Other adverse effects:

Pouring of the product in water may result in an increase in PH.

13. Considerations regarding the disposal

13.1. Methods for handling waste:

Product:

Following the current local and national regulations regarding construction waste.

Do not pour down sewers or watercourses.

Containers and packages:

Empty containers and packages may be recycled.

Containers and packages with product must be disposed of in the same manner as the product.

14. Transport information

Non-hazardous goods and not subject to classification and labelling for transport (ADR/RID, IMDG, IATA).

15. Regulatory information

15.1. Specific safety, health and environmental regulation and legislation for the substance or mixture.

In accordance with the REACH, the mortar is a mixture and therefore it is not subject to registration.

Legal regulations:

- Regulation (UE) no. 453/2010 of the Commission, of 20 May 2010, which modifies Regulation (CE) no. 1907/2006 of the European Parliament and the Council regarding the registration, evaluation, authorization and restriction of chemical compounds and preparations (REACH).

- Regulation (CE) no. 1272/2008 of the European Parliament and the Council, dated 16 December 2008, regarding the classification, labelling and packaging of compounds and mixtures, and which modify and cancel Directives 67/548/CEE and 1999/45/CEE and modifies Regulation (CE) no. 1907/2006.

- Regulation (CE) no. 1907/2006 of the European Parliament and the Council regarding the registration, evaluation, authorization and restriction on chemical substances and preparations (REACH), which creates the European Chemical Substances and Preparations, modifies Directive 1999/45/CE and cancels Regulation (CEE) no. 793/93 of the Council and Regulation (CE) no. 1488/94 of the Commission, as well as Directive 76/769/CEE of the Council and Directives 91/155/CEE, 93/67/CEE, 93/105/CE and 2000/21/CE of the Commission.

- Directive 1999/45/CE of the European Parliament and Council, dated 31 May 1999, regarding the approximation to legal, regulatory and administrative regulations of the member States regarding the classification, packaging and labelling of hazardous preparations

15.2. Chemical safety assessment.

No chemical safety assessment has been carried out.

16. Other information:

16.1. Control of changes:

All the sections of this sheet have been reviewed in accordance with Regulation UE 453/2010. This sheet cancels and replaces all prior editions.

16.2. Complete text of the phrases included in section 3:

H315 Causes skin irritation

H317 May cause an allergic reaction on the skin

H318 Causes serious eye injury

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P102 Keep out of the reach of children

P261 Avoid breathing the powder

P280 Wear protective gloves/clothing/goggles/mask

P302+P353 In case of contact with the skin: wash the affected area with abundant soap and water

P305 + P351 + P338 In case of contact with the eyes: carefully flush eyes with water for several minutes. Remove contact lenses if you are wearing them and they are easy to remove. Continue flushing.

P301 Immediately call a poison control centre or a doctor.

P501 Dispose of the contents/container at the proper waste management point.

16.3. Abbreviations and acronyms:

ADR/RID: European agreement regarding the international transport of hazardous goods by road / Regulation regarding the international transport of hazardous goods by railway.

CAS: Chemical Abstracts Service, (division of the American Chemistry Society).

DNEL: Derived no-effect level

EINECS: European Inventory of Existing Commercial Chemical Substances.

IATA: International Air Transportation Association

IMDG: International maritime dangerous goods code

MEASE: Tool for estimating the exposure to metals and non-organic compounds.

vPvB: Very persistent and very bio-accumulative.

PBT: Persistent, bio-accumulative and toxic.

PNEC: Predicted No-Effect Concentration.

REACH: Registration, Evaluation and Authorisation of Chemical substances and preparations (Regulation (CE) no. 1907/2006).

STOT: Specific target organ toxicity UVCB Substance of unknown or variable composition, products with a complex reaction or biological materials.

VLA-ED: Environmental Limit Value - Daily Professional Exposure

16.4. References:

<http://eur-lex.europa.eu>

<http://esis.jrc.ec.europa.eu/>

16.5. Explanatory note:

The information supplied in this sheet is based on the state of our knowledge at the time the document was published. This document is not a guarantee of the properties of the product. The user is responsible for taking the proper protection measures and of complying with the legal requirements applicable to their activity.

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