**Part 1. IDENTIFICATION OF SUBSTANCE/MIXTURE AND COMPANY/BUSINESS**

* 1. **Product identifier:**

Product name: **IsoTex R70**

Other names: ----------------

* 1. Chemical description: Dry plaster mixture, Portland cement mixture and additives according to STN EN 998-1. Chemical name Portland cement CAS number: 65997-15-1 EC number (EINECS): 266-043-4, Calcium hydroxide CAS number: 1305- 620 EC number (EINECS): 215-137-3

**1.3. Relevant identified uses of the substance or mixture and uses:**

The plaster is intended for manual or machine application outside or inside buildings. The plaster is characterized by high adhesion to the substrate, easy application, reduced surface absorption and extended processing time. Frost-resistant, weather-resistant, the plaster has a long service life and low absorption.

**1.3. Manufacturer identification**

Made in the EU for SICC Coatings GmbH

Phone: +421 903 805 121

 E-mail: info@climatecoating.sk

Website: www.climatecoating.sk

**1.3. Telephone number for emergencies**

Toxicology Information Centre, Na bojišti 1, 128 08 Prague 2

Phone: +420 224 919 293, 224 915 402

**SECTION 2. HAZARD IDENTIFICATION**

**2.1. Classification of the substance or mixture:**

Classification according to Regulation (EC) 1272/2008

Skin irritation, category 2 : H315 irritates the skin.

Serious eye damage, Category 1: H318 Causes serious eye damage.

Skin sensitization, category 1B, H317 May cause an allergic skin reaction.

Specific target organ toxicity - single exposure, Category 3, H335 May cause respiratory irritation.

**2.2. marking elements**

**Hazard warning symbol:**

****

**warning word:**

Danger

**Standard hazard statements:** Portland cement ( CAS: 65997-15-1 )

H315 Irritating to skin.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

**Instructions for safe handling:**

P101 If medical attention is needed, have container or manufacturer's label available.

P102 Keep out of reach of children.

P261 Avoid breathing dust.

P280 Use protective gloves / protective clothing / safety glasses / face shield.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if worn, and remove them if possible. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

P302+P352: IF ON SKIN: Wash with plenty of soap and water. In case of skin irritation or rash

P333+P313: Get medical attention.

P304+P340: IF INHALED: Move person to fresh air and keep in a position that facilitates breathing.

P312 If you feel unwell, call a POISON CENTER or doctor.

P501 Dispose of contents / packaging at a collection point designated according to local regulations.

Hazardous ingredients: Portland cement, calcium hydroxide.

Additional information: The wet mixture can damage products made of aluminum and other non-precious metals.

**Additional hazard information: not applicable**

**Tangible warning for the blind: no**

**Childproof closure: no**

**2.3. Another danger**

Repeated contact, especially of a wet preparation with unprotected skin, may cause skin irritation (irritant contact dermatitis), and some people may develop allergic contact dermatitis.

After mixing with water, a strongly alkaline mixture is formed, which is capable of corroding aluminum or damaging aquatic organisms or plants at high pH. The mixture does not meet the criteria for PBT or vPvB in accordance with Annex XIII of the EU Regulation 1907/2006.

**SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS**

**3.1. Substances: the product is a mixture**

**3.2. Mixtures:**

Dry plaster and mortar mixture

**The product contains the following dangerous substances: Portland cement gray; calcium hydroxide** ;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chemical name:** | **CAS number:****EC number ( EINECS )****Index number:****Registration number:** | **Content in %** | **Classification according to directive 1999/45/EC**Hazard warning symbol, R phrases | **Classification according to regulation (EC) 1272/2008:** Class code and hazard category H sentence |
| Portland cement | 65997-15-1266-043-4 | 25 - 30% | irritating, X iR37/38- 41, sensitizing, R43 | Skin Irritation. 2, H315Eye Dam 1, H318STOT SE 3, H335 |
| Calcium hydroxide | 1305-62-0215-137-3 | 15 - 20% | irritating, X iR37/38- 41, sensitizing, R43 | Skin Irritation. 2, H315Eye Dam 1, H318STOT SE 3, H335 |
| See section 16 for full text of R phrases and H phrases. |

**SECTION 4. FIRST AID INSTRUCTIONS**

**4.1. Description of first aid**

**General instructions:** Immediate medical attention is not usually necessary. If health problems occur after handling the preparation, in case of doubt or in case of persistent problems, seek medical help and show this card or label. It is always necessary to ensure the affected person is calm and to prevent catching a cold.

If unconscious, place the affected person in a stabilized position on his side, with the head slightly tilted, absolutely do not give anything (liquids) by mouth. First aiders do not need any personal protective equipment, but should avoid contact with the wet mixture. Inform the doctor about first aid.

**When inhaled:**

Interrupt the exposure, remove the victim to fresh air. The dust from the throat and nasal cavities should leave spontaneously. If irritation or nausea, cough, or other persistent symptoms persist or develop later, seek medical attention.

**In contact with the skin:**

Remove contaminated clothing, shoes. If the mixture is dry, remove it from the skin and rinse with plenty of water. In the case of a wet mixture, wash the skin with plenty of water. If any skin irritation or burning occurs, seek medical attention.

**In case of eye contact:**

Do not rub your eyes so as not to damage the cornea through mechanical damage. Remove contact lenses if wearing. Tilt the head to the side of the affected eye, open the eyelids wide, and immediately flush the eye(s) thoroughly with plenty of water for at least 30 minutes to remove all particles. Avoid getting into the affected eye. If possible, use isotonic water (0.9% NaCl). See an occupational disease specialist or specialist eye doctor.

**When drinking:**

Do not induce vomiting, rinse mouth with water, give plenty of water to drink. Seek medical attention or contact the Toxicology Information Center.

**4.2. The most important acute and delayed symptoms and effects**

*(effects that can be assumed due to the composition of the mixture)*

*Skin contact: The cement mixture can have irritating effects on the skin after prolonged contact (on moist skin, e.g. when sweating or wetting the skin) or can cause skin dermatitis after repeated contact. Prolonged contact of the skin with the wet mixture can cause serious burns (etching), which initially develop painlessly.*

*Eye contact: Eye contact with cement mixture can cause serious and potentially irreversible eye damage.*

*Inhalation: Long-term or repeated inhalation increases the risk of developing lung diseases.*

**4.3. Indication of any immediate medical attention and special treatment**

Take the safety sheet with you when you visit the doctor.

**SECTION 5. Fire Precautions**

**5.1. Fire extinguisher**

**Suitable extinguishing agents:** The product is non-flammable. For extinguishing surrounding fires, choose an extinguishing agent with consideration for the environment.

**Unsuitable extinguishing media: Water** jet .

**5.2. Special safety arising from the substance or mixture**

They are not known. The mixture is not flammable or explosive, it does not support the burning of other materials.

**5.3. Advice for firefighters**

Use self-contained breathing apparatus and usually fire-fighting equipment (avoid contact with skin and eyes). Prevent the leakage of extinguishing water or mixture into sewers and waterways.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal protection measures, protective equipment and emergency procedures**

Prevent persons not involved in removing the consequences of the spill from moving in places where they may be contaminated by the spilled product. Ensure draft-free ventilation inside buildings. When cleaning, choose procedures that do not increase the formation of dust aerosol (see section 6.3). When wet procedures are used, an uncleaned floor or substrate can become slippery. Use the recommended personal protective equipment when working (see section 8).

**6.2 Measures to protect the environment**

Prevent leakage and spread of spilled material. If possible, keep the material dry. If possible, cover the area to avoid unnecessary dust hazards. Prevent uncontrolled leakage into waterways and sewers (increase in pH). Any major spill into waterways must be reported to the Environment Agency or other responsible authority.

**6.3 Methods and material for containment and cleaning up**

Collect the spilled dry material mechanically, and if it is not contaminated, reuse it. Use dry cleaning methods such as vacuuming or vacuuming (using air filters). Do not use compressed air.

It is also possible to use wet cleaning (water spray or mist), prevent dust from rising, wipe off the dust and remove the resulting sludge. Remove the wet mixture in the same way. Allow the sludge to solidify and remove according to section 13.

**6.4 Reference to other parts**

See section 8 for personal protective equipment.

See section 13 for waste disposal.

**SECTION 7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Read the instructions for use. When handling the dry mixture, do not inhale dust, work in well-ventilated areas, use protective work equipment against dust inhalation (see section 8). Avoid contact with eyes and skin when working with dry or wet mixture by using personal protective equipment (see section 8).

Keep work tools in places where they come into contact with your hands clean. Work clothing and protective work equipment soiled to the extent that the mixture penetrates the surface of the skin, or moisture seeps into the inside of the protective equipment or work clothing, replace it with clean and dry ones as soon as possible.

Do not eat, drink or smoke while working, observe general safety and hygiene measures for working with chemicals.

**7.2 Instructions for safe storage of substances and mixtures, including any incompatibilities**

Store in original closed packaging, in a dry place, protect from moisture, separately from food, drinks and feed. Possible freezing of the product will not affect its functionality. Store out of reach of children.

**7.3 Specific end use / Specific end use**

it is not mentioned

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 control parameters**

The mixture contains substances for which the following highest permissible concentrations in the working atmosphere are set in the Slovak Republic according to government regulation no. 361/2007 Coll., as amended **.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chemical name** | **CAS number** | **PELc (mg/m3)** | **NPK-P** | **note** |
| Portland cement | 65997-15-1 | 10 | - |  |
| Calcium hydroxide | 1305-62-0 | 2 | 4 |  |

**Limit exposure values at the workplace according to directive no. 2006/15 / EC - not listed**

**The limit values of indicators of biological exposure tests are not specified in Decree no. 432/2003 Coll.**

**DNEL and PNEC values:** not yet available

**8.2. Limiting exposure**

To limit exposure, it is necessary to prevent the formation of dust. Furthermore, suitable protective equipment is recommended. Eye protection devices (e.g. safety glasses or face shields) must be used if the nature and type of use cannot exclude potential contact with the eyes (e.g. closed process), further face protection, protective clothing and safety shoes.

**8.2.1 Appropriate technical measures**

Ensure sufficient ventilation of the workplace. or ventilation. If this is not possible, use personal protective equipment for respiratory protection. Handling of dry mixtures and cleaning of the workplace must be ensured by techniques that do not increase the concentration of dust in the working atmosphere. When working with dry mixtures outside construction objects, it is necessary that, in case of wind, the worker moves from the point of leakage of dust particles into the air against the direction of the wind flow. In the event that there is a possibility of eye contact when handling the product, it is advisable to provide a source of water within reach for a quick eye wash.

**8.2.2. Individual protective measures, including personal protective equipment**

**a) Respiratory protection**

When opening the package with the dry mixture, when pouring it out of the package or when transferring the dry mixture into work containers and in the initial phase when mixing water is added to the dry mixture, it is necessary to use a mask or respirator with a dust filter with a protection factor of at least 10.

**b) Eye and face protection**

If a full-face protective mask is not used when working with the dry mixture, tight protective glasses should be used to prevent dust particles from entering the eyes. The use of protective glasses is also required when handling wet mortar or glue, where there is a risk of splashing of the material. Especially when throwing or applying mortar above head level.

**c) Skin protection**

Because both dry and wet mixtures irritate the skin, exposure should be minimized as much as is technically feasible. The work requires the use of protective gloves, standard full-skin protective workwear with tight-fitting sleeves and pants, preventing the ingress of dust, and the wearing of caustic-resistant and dust-resistant shoes.

**8.2.3 Limiting environmental pollution**

Ensure packaging is closed during storage, handling and transportation. Secure storage areas against possible leakage of the product into the surrounding environment (into sewage, water and soil - see 6.2). Possible leakage of the product Do not flush into sewers or waterways. The pH of water contaminated by the product, which can flow into the sewage system in large quantities, should not exceed 9.

Equip the workplace and warehouses with the means to clean up an accidental spill.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state: loose solid, powder

Color: gray to off-white

Odor: odorless

pH value: not known

Melting point / freezing point not known

Boiling point: not known

Flash point: not known

Evaporation rate: not known

Flammability: not known

Explosive properties: not explosive, upper limit - not known, lower limit - not known

Oxidizing properties: not known

Vapor tension: not known

Relative density (at 18 o C): not known

Solubility in water (at 18 o C): Slightly soluble in water

Fat solubility: not known

Partition coefficient n-octanol/water: not known

Viscosity: not known

Vapor density: not known

Evaporation rate: not known

**SECTION 10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

When mixed with water, a highly alkaline mixture is formed, which gradually hardens. After the entire mixture has hardened, a stable mass is formed.

**10.2 Chemical stability**

Under normal use, the product is stable when stored and handled as prescribed. Protect the mixture against the effects of water and air humidity. Decomposition does not occur. Keep the product dry. It is necessary to exclude contact with incompatible materials.

The wet mixture is alkaline/alkaline and reacts with acids, ammonium salts, aluminum or other base metals. Portland cement dissolves in hydrofluoric acid to form caustic silicon tetrafluoride gas. Portland cements react with water to form silicates and calcium hydroxide. Silicates in cements react with strong oxidizing agents such as fluorine, boron fluoride, chlorine fluoride, manganese fluoride and oxygen difluoride.

**10.3 Possibility of dangerous reactions**

Uncontrolled use of aluminum powder should be avoided, when reacting with cement and calcium hydroxide, hydrogen is formed / evolved. Calcium hydroxide reacts exothermically with acids. After heating above 580 ° C, calcium hydroxide decomposes to form calcium oxide (CaO) and water (H2O): Ca (OH) 2 -> CaO + H2O. Calcium oxide reacts with water to generate heat. This can be dangerous for flammable materials.

**10.4 Conditions to avoid:**

When storing, minimize exposure to air and moisture, which can cause loss of product quality (caking)

**10.5 Incompatible Materials**

Acids, ammonium salts, aluminum or other base metals.

**10.6 Hazardous decomposition products:** discarded

**SECTION 11. TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects:**

**Human experience:**

By mixing the mixture with water or with moisture, a strongly alkaline mixture with irritating effects is formed. The product in the form of dust and when mixed with water irritates the conjunctivae and the skin. Dust can cause respiratory irritation.

High concentrations of dust irritate the respiratory organs (coughing, sneezing, shortness of breath).

In contact with the eyes, the mixture has irritating effects, in the case of massive intervention or insufficient treatment (immediate eye irrigation for several minutes is necessary) eye inflammation may occur up to chemical burns, which may lead to permanent eye damage (blindness).

Repeated contact of the mostly wet mixture with unprotected skin may cause skin irritation (irritant contact dermatitis). Dermatitis is manifested by itching of inflamed skin. The skin looks red, scaly and cracked.

Irritant contact dermatitis is caused by a combination of the physical properties of the drug (wetness, high alkalinity and abrasion).

Prolonged contact of wet cement / cement mixture with the skin with simultaneous friction can cause severe burns.

Health conditions worsened by exposure Inhaling cement dust can worsen existing respiratory diseases or health conditions such as emphysema (swelling of the lungs) or asthma or existing skin or eye conditions.

**11.2. Information on toxicological effects**

Acute toxicity for components:

Calcium hydroxide, CAS 1305-62-0

Oral: LD50 > 2000 mg/kg (OECD 425, rat)

Dermal: LD50 > 2500 mg/kg (OECD 402, rabbit

Inhalation: no data available

When classifying the mixture, the pH value of the wet mixture (11 - 13.5), the general concentration limits of the components of the mixture and information from the safety data sheets of the individual components with reference to the literature were taken into account.

a) acute toxicity: based on the properties of the individual components, the mixture does not meet this classification

b) irritation: based on the properties of the individual components, the mixture was classified:

Serious eye damage, category 1 - Eye Dam. 1 (H318)

Skin irritation, category 2 - Skin Irrit. 2 (H315)

c) corrosiveness: not determined for the mixture; based on the properties of the individual components, the mixture does not meet this classification

d) sensitization: not determined for the mixture; based on the properties of the individual components, the mixture does not meet this classification

e) repeated dose toxicity: not determined for the mixture; based on the properties of the individual components, the mixture does not meet this classification

f) carcinogenicity: not determined for the mixture; based on the properties of the individual components, the mixture does not meet this classification

g) mutagenicity: not determined for the mixture; based on the properties of the individual components, the mixture does not meet this classification

h) reproductive toxicity: not determined for the mixture; based on the properties of the individual components, the mixture does not meet this classification

i) Toxicity for a specific target organ - single exposure: based on the properties of the individual components, the mixture was classified:

Specific target organ toxicity - single exposure, respiratory tract irritation - STOT SE 3 (H335)

j) Toxicity for a specific target organ - repeated exposure: not determined for the mixture; based on the properties of the individual components, the mixture does not meet this classification

k) Aspiration hazard: not determined for the mixture; based on the properties of the individual components, the mixture does not meet this classification

**SECTION 12. ECOLOGICAL INFORMATION**

Mixing the product with water will increase the pH value (11 - 13.5), the mixture is highly alkaline and may pose a short-term danger to aquatic organisms. The pH value depends on the concentration of the product in the water. The pH value decreases rapidly due to dilution. After the product hardens with water or air humidity, the product does not pose a danger to aquatic organisms even for a short time. Prevent soil contamination and release to surface or ground water, sewers, waterways and the environment.

**12.1 Toxicity - acute and chronic effects:**

not determined for the mixture, due to the nature of the individual components, it is not expected

Calcium hydroxide, CAS 1305-62-0

LC50 (96h) for freshwater fish: 50.6 mg/l

LC50 (96h) for marine fish: 457 mg/l

EC50 (48h) for freshwater invertebrates: 49.1 mg/l

LC50 (96h) for marine invertebrates: 158 mg/l

EC50 (72h) for freshwater algae: 184.57 mg/l

NOEC (72h) for seaweed: 48 mg/l

NOEC (14d) for marine invertebrates: 32 mg/l

EC10/LC10 or NOEC for soil microorganisms: 2000 mg/kg dry soil

EC10/LC10 or NOEC for soil microorganisms: 12000 mg/kg dry soil

NOEC (21d) peo terrestrial plants: 1080 mg/kg

At a high concentration, calcium hydroxide is used to disinfect waste sludge through an increase in temperature and pH.

Acute effect through pH change - although calcium hydroxide is used to adjust the acidity of water, the content can be increased by more than 1 g / l dangerous for aquatic life. A pH > 12 decreases rapidly due to dilution and conversion to carbonate.

**12.2** **Persistence and degradability:** not determined for the mixture, due to the nature of the individual components, it is not expected

**12.3** **Bioaccumulative potential:** not determined for the mixture, due to the nature of the individual components, it is not expected

**12.4** **Mobility in soil:** not determined for the mixture, due to the nature of the individual components, it is not expected; after hardening of the product with water, a stable solid product is formed. Calcium hydroxide by itself is hardly soluble in water and exhibits low mobility in most soils. It is used, among other things, as a fertilizer.

**12.5** **Results of PBT and vPvB assessment:** does not contain PBT or vPvB substances

**12.6** **Other adverse effects:** no data available

**SECTION 13. DISPOSAL INSTRUCTIONS**

**13.1 Methods of waste treatment (remains of mixture and water-polluted mixtures)**

Suitable methods for removing the mixture and contaminated packaging Both the mixture (residues) and the empty packaging must be disposed of in accordance with applicable legislation as hazardous waste at a place designated by the municipality for the disposal of hazardous waste or handed over for disposal to a professionally qualified company. Waste must be secured against leakage into the surrounding environment. When handling waste, it is recommended to use personal protective equipment (see 8.2).

Dust: 10 13 06 Solid pollutants and dust (except waste listed under numbers 10 13 12 and 10 13 13)

Unused product:

10 13 11 waste from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10

10 13 14 Waste concrete and concrete sludge

Product after mixing with water (and hardening): 17 01 01 Concrete

Packaging: according to the specific type of packaging, packaging group 15 01 xx (mainly 15 01 01 to 15 01 03)

**Legal regulations on waste**

Act No. 185/2001 Coll. on waste, as amended, and its implementing regulations

Act No. 477/2001 Coll., on packaging, as amended

**SECTION 14. PREPRAE INFORMATION**

The products are not within the meaning of § 22, par. (1) Act No. 111 / 1994 Coll. on the road transport of dangerous goods as amended and are not subject to the provisions of the European Agreement on the Carriage of Dangerous Goods by Road (ADR) or the provisions of the Regulations for the International Rail Transport of Dangerous Goods (RID).

14.1 UN number: not applicable

14.2 UN proper shipping name: not applicable

14.3 Transport hazard class/classes: not applicable

14.4 Packing group: not applicable

14.5 Environmental hazard: not applicable

14.6 Special safety measures for the user: not applicable

14.7 Carriage of bulk cargo according to Annex II to the MARPOL Convention and the IBC Code: not applicable

**SECTION 15. REGULATORY INFORMATION**

**15.1** **Safety, health and environmental regulations / legislation specific to the substance or mixture**

Regulation of the EP and the Council (EC) no. 1907/2006, on the registration, evaluation, authorization and restriction of chemical substances (REACH), as amended; Regulation of the EP and the Council (EC) no. 1272/2008, on classification, labeling and packaging of substances and mixtures (CLP), as amended;

Directive 67/548 / EEC, on the approximation of legislation relating to the classification, packaging and labeling of dangerous substances (DSD);

Directive 1999/45 / EC, on the approximation of the legal and administrative measures of the member states on the classification, packaging and labeling of dangerous preparations as amended (DPD);

European Agreement on the International Carriage of Dangerous Goods by Road (ADR)

Law no. 258/2000 Coll. On the protection of public health, as amended;

Act 262/2006 Coll., Labor Code, as amended;

Government Regulation no. 361/2007 Coll., Establishing the conditions for the health protection of employees at work, as amended; Act No. 201/2012 Coll. on air protection and its implementing regulations;

Law no. 185 / 2001Coll. on waste, as amended, and its implementing regulations;

Law no. 477/2001 Coll. on packaging as amended

**15.2 Chemical safety assessment:**

For the purposes of registration of dust from the production of Portland clinker, a chemical safety assessment was carried out for a number of scenarios of its use, including scenarios of use in dry mortar mixtures. All significant conclusions from the assessment of this substance, which can also be applied to cement clinker, are included in this safety data sheet. Mortar mixtures are a product intended for final use, therefore no other exposure scenarios are attached to the safety data sheet.

**SECTION 16. FURTHER INFORMATION**

**R-phrase:**

R 20/22 Harmful by inhalation and if swallowed

R 36 Irritating to eyes

R 37 Irritating to respiratory tract

R 38 Irritating to skin

R 41 Risk of serious damage to eyes

R 43 May cause sensitization by skin contact

**H-phrase:**

H315 Irritating to skin.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

**P-sentence:**

P101 If medical attention is needed, have the container or manufacturer's label available.

P102 Keep out of reach of children.

P261 Avoid breathing dust.

P280 Wear protective gloves / protective clothing / safety glasses / face shield.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if worn, and remove them if possible. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water. In case of skin irritation or rash

P333 + P313: Get medical attention.

P304 + P340: IF INHALED: Remove person to fresh air and keep in a position that facilitates breathing.

P312 If you feel unwell, call a POISON CENTER or doctor.

P501 Dispose of contents / packaging at a collection point designated according to local regulations.