## *1 Identification of the substance/mixture and of the company/undertaking*

1.1 · **Product identifier**

**Trade name: Rimat Grün 150**

1.2 · **Relevant identified uses of the mixture and uses advised**

**Uses of the substance/mixture: construction product**

1.3 · **Details of the supplier of the Safety Data Sheet**

**Manufacturer/Supplier:**
Saint-Gobain Rigips GmbH
Schanzenstraße 84
D-40549 Düsseldorf
Germany

**National contact:**
Saint-Gobain Rigips GmbH - Ladenburg Development Center – Gypsum Development
Dr.-Albert-Reimann-Straße 20
D – 68526 Ladenburg
+49(0)621-4701691
Email forschung-entwicklung@rigips.de

1.4 · **Emergency telephone number:**
Tel +49 (0)621 4701691 (only at daily working-times)

European Emergency Number: 112

## *2 Hazards identification*

2.1 · **Classification of the mixture**

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

Signal word: Danger

Hazard pictogram:  GHS 05

Category: eye damage 1

Hazard statement(s): H 318 Causes serious eye damage

| Hazard class | Hazard category | Picto-gram / code | Signal word | Hazard statement code | Hazard statement text | Concentration range |
|---|---|---|---|---|---|---|
| serious eye damage/ eye irritation | irreversible effects on the eye Category 1 | GHS 05 | Danger | H 318 | Causes serious eye damage | ≥ 1% - < 10% and pH ≥ 11,5 |

2.2 · **Label elements**
**Labelling according to Regulation (EC) No 1272/2008 [CLP]**

**Hazard pictogram(s)**  **GHS05**

**Signal word** Danger

**Substances in the mixture that contribute to the classification for labelling:** calcium dihydroxide

**Hazard statement(s):** H 318 Causes serious eye damage

**Precautionary statement(s)**
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338, P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER or doctor/physician.
P102: Keep out of reach of children.
P501: Dispose of contents/container according to national legislation.
Remark: P501 is not applicable for silos to be re-used.

2.3 **Other hazards**
**Results of PBT- and vPvB assessment**
**PBT:** Not applicable.
**vPvB:** Not applicable.

## *3 Composition/information on ingredients*

**Chemical characterization: mixture**

**Description:** Mixture of gypsum with calcium dihydroxide, water-repellent and non-hazardous components.

**Hazardous ingredients:**

| | | |
|---|---|---|
| $Ca(OH)_2$<br><br>CAS Nr.: 1305-62-0<br><br>EINECS Nr.:215-137-3<br><br>REACH Registrierungs-Nummer:<br>01-2119475151-45 - xxxx | **calcium dihydroxide**<br>STOT single exposure 3, route of exposure: inhalation<br>Skin irritation 2<br>Eye damage 1<br>  <br>H315<br>H318<br>H335 | ≥ 1% - < 10% (weight)<br>and<br>pH ≥ 11,5 |

**Additional information:**

| | | |
|---|---|---|
| $CaSO_4 \times n H_2O$<br><br>CAS Nr.: 7778-18-9<br><br>EINECS Nr.: 231-900-3<br><br>REACH Registrierungs-Nummer:<br>01-2119444918-26- xxxx | **calcium sulfate**<br>This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]. | ≥ 50 % |

*Full text of H-phrases: see section 16.*

## *4 First aid measures*

4.1· **Description of first aid measures**

**General notes:**
No adverse effects are expected during normal use of the substance, however if any effects do appear the following recommendations apply:

**Following inhalation:**
Following inhalation of large quantities of dust remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Following skin contact:**
Do not let product dry on skin. After contact with skin, wash immediately with plenty of water.
Clean contaminated clothing before use. Clean contaminated shoes before use.
If necessary seek medical advice.

**Following eye contact:**
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
Remove contact lenses if possible.

**Following ingestion:**
Rinse mouth immediately and drink plenty of water. Seek medical advice.

4.2 - **Most important symptoms and effects, both acute and delayed**
Risk of serious damage to eyes.
No known other specific symptoms or effects to date.

4.3 - **Indication of any immediate medical attention and special treatment needed**
See description of first aid measures in 4.1.

## *5 Firefighting measures*

5.1· **Extinguishing media**

**Suitable extinguishing media:**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Extinguishing media which must not be used for safety reasons:** None.

5.2 **Special hazards arising from the substance or mixture:** None.

5.3· **Advice for firefighters:**
Product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

5.4 **Special protective equipment for firefighters:** No special protective equipment.

5.5 **Other information:**
Product setting in contact with water.

## *6 Accidental release measures*

6.1 · **Personal precautions, protective equipment and emergency procedures**
**For non-emergency personnel**

Ventilate area of leak or spill.
Wear appropriate personal protective equipment.
Avoid generation of dust.
Special danger of slipping by leaking/spilling product.

6.2 · **Environmental precautions:**

No special environmental measures are necessary.
Do not allow uncontrolled release into surface water or drains (pH-rising).

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

For containment
All containment for dry substances suitable

For cleaning up
Sweep up mechanically and containerize for reclamation or disposal. Vacuuming or wet sweeping of solids may be used to avoid dust dispersal

6.4 - **Reference to other sections**
None.

## *7 Handling and storage*

7.1· **Precautions for safe handling**

Protective measures:
No special provisions if the product is used appropriately.

Avoid:
Dust dispersion
Inhalation of dust/particles
Eye contact

Measures to prevent fire:
Product itself does not burn.
No special fire protection measures are necessary.

Measures to prevent aerosol and dust generation:
If technically possible use local exhaust ventilation.

Measures required to protect the environment:
No special provisions if the product is used appropriately.

Advice on general occupational hygiene:
Do not to eat, drink and smoke in work areas
Wash hands after use
Remove contaminated clothing and protective equipment before entering eating areas.

7.2 **Conditions for safe storage, including any incompatibilities**

**Storage:**
Technical measures and storage conditions:
Packaging materials:
Keep/store only in original container.

**Requirements for storage rooms and vessels:**
None.

**Hints on storage assembly:**
None.

**Further information on storage conditions:**
Storage according to BREF “Emissions from Storage”

**Storage class:** Non-combustible solids.

7.3 **Specific end use(s)**

The specific end-use as indoor construction material is covered by the exposure scenarios of the ingredients calciumsulfate and calciumdihydroxide, both.

## ***8 Exposure controls/personal protection***

8.1 · **Control parameters**

**Occupational exposure limits:**
**DNEL-values:**

**Dust (Germany)**
Respirable fraction
General dust limit (TRGS 900) Exposure duration 8h: 3 mg/m3
General dust limit (TRGS 900) Exposure duration 15 minutes: 6 mg/m3

*Remark: Calculated DNEL values for inhalation of calcium dihydroxide respirable dust will not be exceeded by keeping the general dust limits.*

Inhalable fraction:
General dust limit (TRGS 900) Exposure duration 8h: 10 mg/m$^3$
General dust limit (TRGS 900) Exposure duration 15 minutes: 20 mg/m$^3$

**Calcium sulfate (Germany)**

Respirable fraction
Calcium sulfate dust limit (TRGS 900) Exposure duration 8h 6 mg/m3
Calcium sulfate dust limit (TRGS 900) Exposure duration 15 minutes: -

*Remark: Calculated DNEL values for inhalation of calcium sulfate respirable dust will not be exceeded by keeping the general dust limits..*

**PNEC-values:**

**Calcium dihydroxide**
PNEC water: 490 µg/l
PNEC soil/groundwater: 1080 mg/l

**Calcium sulfate**
PNEC stp: 100 mg/l

8.2 · **Exposure controls**
To control potential exposures, generation of dust should be avoided. Further, appropriate protective equipment is recommended. Eye protection equipment (e.g. goggles or visors) must be worn, unless potential contact with the eye can be excluded by the nature and type of application (i.e. closed process). Additionally, face protection, protective clothing and safety shoes are required to be worn as appropriate.

**Appropriate engineering controls**
If user operations generate dust, use dust-reduced mixing pumps, process enclosures, or local exhaust ventilation.

**Personal protective equipment:**

**General protection and hygiene:**
General precautionary measures handling chemical substances to be applied.

**Respiratory protection:** During dust exposure particle filter mask type FFP1 is recommended.

**Hand protection:** By long-term hand contact wear protective gloves.

**Suitable glove type**
It is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Breakthrough time (maximum wear duration)**
The exact breakthrough time is only available from glove producers.

**Eye protection:** During danger of spilling / splashing wear eye glasses with side protection.

**Body protection:** Protective clothing

## *9 Physical and chemical properties*

9.1 · **Information on basic physical and chemical properties**

**-** a) **Appearence:**
**- Physical state:** Powder
**- Colour:** white, grey

- b) **Odour:** Neutral
- c) **Odour threshold:** not applicable

-d)
In aqueous solution: **pH-Wert (100 g/l) at 20°C: >** 11,5
Not applicable in delivery state.

**Change of state**
**-e) Melting point / freezing point:** Not applicable.
**- f) Initial boiling point and boiling range:** Not applicable.
**-g) Flash point:** Not applicable.
**-h) Evaporation rate:** Not applicable**.**
**-i) Flammability (solid, gas):** Not flammable.
**-j) Upper/lower flammability or explosive limits:** Not applicable.
**-k) Vapour pressure:** Not applicable.
**-l) Vapour density:** Not applicable.
-**m) Relative density:** 2,24 – 2,96 g/cm³

-n) **Solubility(ies)-**
**Water solubility (20°C in g/l):** about 2 g/l

**-o) Partition coefficient: n-octanol/water (log Po/w):** Inorganic mixture.
**-p) Auto-ignition temperature**: Not applicable.
-q) **Decomposition temperature**
into CaO and H2O at about 580°C (ca. 853 K)
into CaSO4 and H2O at about 700°C (ca. 973 K)
into CaO and SO3 at about 1000°C (ca. 1273 K)

-r) **Viscosity**: Not applicable
-s) **Explosive properties**: None.
-q) **Oxidizing properties**: No oxidizing properties.

9.2 · **Other information:** None.

## *10 Stability and Reactivity*

10.1 · **Reactivity**
Materials to avoid: No materials known.

10.2 · **Chemical stability**
The mixture is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 · **Possibility of hazardous reactions**
None.

10.4· **Conditions to avoid**
Avoid contamination by sulphur-reducing bacteria and water under anaerobic conditions.

10.5· **Incompatible materials:** No incompatible materials known.

10.6 · **Hazardous decomposition products:** No hazardous decomposition products known. Remark: Calcium dihydroxide reacts with carbon dioxide to form calcium carbonate, which is a common material in nature.

## *11 Toxicological information*

11.1 · **Information on toxicological effects**

**Data based on the mixture**

| Toxicity endpoints | Results |
|---|---|
| **Acute toxicity** | Available data do not lead to a classification of the mixture.<br>The mixture is not acute toxic according to the evaluation of data for calcium sulfate and calcium. |
| **Skin corrosion/irritation** | Available data do not lead to a classification of the mixture.<br>The result of a study on the mixture of calcium sulfate and calcium dihydroxide does not result in acute skin corrsion/irritation.<br>Remark: Frequent or prolonged exposure, eventually strengthened by mechanically effects, could lead to skin irritation. |
| **Eye damage/irritation** | As a result of studies (in vivo, rabbit) calcium dihydroxide causes serious eye damage (H318 – Causes seroious eye damage).<br>(Calculation based on the concentrations of the ingredients.) |
| **Respiratory or skin sensitisation** | Available data do not lead to a classification of the mixture.<br>The mixture is not a skin / respiratory sensitizer according to the data on calcium sulfate and calcium dihydroxide. |
| **Germ cell mutagenicity** | Available data do not lead to a classification of the mixture.<br>The mixture is not mutagenic according to the data on calcium sulfate and calcium dihydroxide. |
| **Carcinogenicity** | Available data do not lead to a classification of the mixture.<br>The mixture does not pose any risk of carcinogenicity according to the data on calcium sulfate and calcium dihydroxide. |
| **Reproductive toxicity** | Available data do not lead to a classification of the mixture.<br>The mixture does not show any signs of reproductive toxicity according to the data on calcium sulfate and calcium dihydroxide. |
| **STOT-single exposure** | Available data do not lead to a classification of the mixture.<br>(Calculation based on the concentrations of the ingredients.) |
| **STOT-repeated exposure** | Available data do not lead to a classification of the mixture. |
| **Aspiration hazard** | Available data do not lead to a classification of the mixture. |

## *12 Ecological information*

12.1 · **Toxicity**
**Aquatic toxicity:** No relevant information available.
**Further ecological information:**

**General Information:**
Germany Water hazard class (WGK): slightly hazardous to water (WGK 1)
Do not allow undiluted product or large volumes to enter into ground water, surface water, or drains.

12.2 **Persistence and degradability**
Abiotic degradability, physical and photo-chemical degradability:
The product hydrolyses quickly in the presence of water to:
Calcium-, Hydroxyl- und Sulfate ions
The individual components are poorly eliminated from water.
No photo-chemical elimination.

Biological degradability:
The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 - **Bioaccumulative potential**
Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.
No indication of bioaccumulation potential.

12.4- **Mobility in soil**
Water soluble solid.
Natural component in soils.
If product enters soil, it will be mobile and may contaminate groundwater.

12.5 · **Results of PBT and vPvB assessment**
**PBT:** Not applicable.
**vPvB:** Not applicable.

## *13 Disposal considerations*

**European List of Wastes**
List of proposed waste codes/waste designations in accordance with the European List of Wastes:
Please select

17 CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED
SOIL FROM CONTAMINATED SITES)

1701 concrete, bricks, tiles and ceramics
170107 mixture of concrete, bricks, tiles and ceramics other than those mentioned in 170106

1708 gypsum-based construction material
170802 gypsum-based construction materials other than those mentioned in 170801

17 09 other construction and demolition waste
170904 mixed construction and demolition wastes other than those mentioned in 170901, 170902 and 170903

13.1 · **Waste treatment methods**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
Product may be reused without remediation, if not contaminated

Waste:
The waste is to be kept separate from other types of waste until its recycling. Recovery/recycling in installations with permit for processing waste codes listed above.
Waste disposal on landfills for non-hazardous waste according to Council Decision 2003/33/EC.

Packaging:
Non-contaminated, completely emptied packages may be recycled.
P501: Dispose of contents/container according to national legislation.

## *14 Transport Information*

14.1 UN number: None.
14.2 UN proper shipping name: Not applicable.
14.3 Transport hazard class(es): Not applicable.
14.4 Packing group: Not applicable.
14.5 Environmental hazards: None.
14.6 Special precautions for user: None.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

## *15 Regulatory information*

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

**National legislation:**
**Wassergefährdungsklasse:**
Germany Water hazard class (WGK): slightly hazardous to water (WGK 1)

**15.2 • Chemical Safety Assessment:** The chemical safety assessments on the substances calciumsulfate and calciumdihydroxide have been considered for this data sheet.

## *16 Other information*

**Indication of changes** Classification according to regulation (EC) 1207/2008 [CLP].

**Key literature references and sources for data**

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]**

**Relevant R-phrases and/or H-statements (number and full text)**
H315: Causes skin irritation.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

**Relevant S-phrases and/or P-statements (number and full text)**
P280: Wear protective gloves/protective clothing/eye protection/face protection
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P310 Immediately call a POISON CENTER or doctor/physician.
P102: Keep out of reach of children
P501: Dispose of contents/container according to national legislation.

**Department issuing MSDS:**
Saint-Gobain Rigips GmbH, Department: Ladenburg Development Center – Gypsum Development (LDC-GD); 68526 Ladenburg

**Point of contact:**
See point 1

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