

PRB ALG GRAIN FIN - PRBALGGF

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : PRB ALG GRAIN FIN
Product code : PRBALGGF.

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

Coating

1.3. Details of the supplier of the safety data sheet

Registered company name : PRB S.A.
Address : 16 RUE DE LA TOUR CS 10018 . 85150. LES ACHARDS. FRANCE.
Telephone : 02 51 98 10 10. Fax : 02 51 98 10 21.
contact@prb.fr

1.4. Emergency telephone number : 33(0)1 45 42 59 59.

Association/Organisation : INRS.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS05



GHS07

Signal Word :

DANGER

Product identifiers :

EC 266-043-4 PORTLAND CEMENT CLINKER
EC 215-137-3 CALCIUM DIHYDROXIDE
EC 270-659-9 FLUE DUST PORTLAND CEMENT

Hazard statements :

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.

Precautionary statements - General :

P102 Keep out of reach of children.

Precautionary statements - Prevention :

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ ...

Precautionary statements - Response :

P302 + P352 IF ON SKIN: Wash with plenty of water/...
P305 + P351 + P338 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/doctor/...

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P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Precautionary statements - Disposal :

P501 Dispose of contents/container to ...

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

When mixed with water, the preparation obtained has a high pH (12-13). It can then irritate the skin in case of prolonged contact and cause damage to the eyes in case of projection.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
INDEX: PRB019 CAS: 14808-60-7 EC: 238-878-4 QUARTZ (SIO2)		[1]	50 \leq x % < 100
INDEX: PRB004 CAS: 65997-15-1 EC: 266-043-4 PORTLAND CEMENT CLINKER	GHS07, GHS05 Dgr Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Dam. 1, H318 STOT SE 3, H335	[1]	10 \leq x % < 25
INDEX: PRB003 CAS: 1317-65-3 EC: 215-279-6 LIMESTONE		[1]	2.5 \leq x % < 10
INDEX: PRB076 CAS: 1305-62-0 EC: 215-137-3 REACH: 01-2119475151-45 CALCIUM DIHYDROXIDE	GHS07, GHS05 Dgr Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[1]	2.5 \leq x % < 10
INDEX: PRB519 CAS: 471-34-1 EC: 207-439-9 CALCIUM CARBONATE		[1]	0 \leq x % < 2.5
INDEX: PRB518 CAS: 68475-76-3 EC: 270-659-9 REACH: 01-2119486767-17 FLUE DUST PORTLAND CEMENT	GHS07, GHS05 Dgr Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Dam. 1, H318 STOT SE 3, H335		0 \leq x % < 2.5

(Full text of H-phrases: see section 16)

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

In case of inhalation, take the patient outdoor to fresh air.

Consult a doctor if breathing problem.

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In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.
Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.
If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.
Watch out for any remaining product between skin and clothing, watches, shoes, etc.
In the event of an allergic reaction, seek medical attention.
If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.
In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.
Seek medical attention immediately, showing the label.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

No data available.

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.
Do not breathe in smoke.

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.
Avoid inhalation of dust.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming) : do not generate dust.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.
Remove and wash contaminated clothing before re-using.
Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention :

Prevent access by unauthorised personnel.
Handle in well-ventilated areas.

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Recommended equipment and procedures :

For personal protection, see section 8.
Observe precautions stated on label and also industrial safety regulations.
Avoid inhaling dust.
Avoid eye contact with this mixture at all times.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.
Keep in its original sealed packaging into normally dry atmosphere and sheltered during about 1 year.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Average dust concentration of inhaled air

Total dust VME : 10 mg/m³

Respirable dust VME : 5 mg/m³

The preparation contains siliceous sands including quartz as crystalline silica which have an inhalable alveolar fraction below 1% , then without classification.

Alveolar dust can be generated in the work environment by the used operating procedure.

Therefore, the average concentration of respirable dust inhaled from the atmosphere during 8 hours should not exceed 0.1 mg/m³ for quartz.

Occupational exposure limits :

- France (INRS - ED984 :2016) :

CAS	VME-ppm :	VME-mg/m ³ :	VLE-ppm :	VLE-mg/m ³ :	Notes :	TMP No :
14808-60-7	-	0.1 A	-	-	-	25
1317-65-3	-	10	-	-	-	-
1305-62-0	-	5	-	-	-	-
471-34-1	-	10	-	-	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
14808-60-7	0.3 mg/m ³	-	-	-	R
65997-15-1	- ppm 4 mg/m ³	- ppm - mg/m ³			
1317-65-3	- ppm 4 mg/m ³	- ppm - mg/m ³			
1305-62-0	- ppm 5 mg/m ³	- ppm - mg/m ³			
471-34-1	10 mg/m ³	-	-	-	TI

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

CALCIUM CARBONATE (CAS: 471-34-1)

Final use:

Exposure method:
Potential health effects:
DNEL :

Exposure method:
Potential health effects:
DNEL :

Workers.

Inhalation.
Long term local effects.
4.26 mg of substance/m³

Inhalation.
Long term systemic effects.
10 mg of substance/m³

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Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Inhalation.
Long term local effects.
1.06 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
10 mg of substance/m3

CALCIUM DIHYDROXIDE (CAS: 1305-62-0)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Inhalation.
Short term local effects.
4 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term local effects.
1 mg of substance/m3

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Inhalation.
Short term local effects.
4 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term local effects.
1 mg of substance/m3

LIMESTONE (CAS: 1317-65-3)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Inhalation.
Long term systemic effects.
10 mg of substance/m3

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Short term systemic effects.
6.1 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Ingestion.
Long term systemic effects.
6.1 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
10 mg of substance/m3

Predicted no effect concentration (PNEC):

CALCIUM CARBONATE (CAS: 471-34-1)

Environmental compartment:
PNEC :

Waste water treatment plant.
100 mg/l

CALCIUM DIHYDROXIDE (CAS: 1305-62-0)

Environmental compartment:
PNEC :

Soil.
1080 mg/kg

Environmental compartment:

Fresh water.

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PNEC :	0.49 mg/l
Environmental compartment: PNEC :	Sea water. 0.32 mg/l
Environmental compartment: PNEC :	Waste water treatment plant. 3 mg/l
LIMESTONE (CAS: 1317-65-3) Environmental compartment: PNEC :	Waste water treatment plant. 100 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

Prescription glasses are not considered as protection.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing dust.

Wearing a protective mask is recommended when handling powders.

N/A

Wear a disposable half-mask dust filter in accordance with standard EN149.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	Powder or dust.
product color	colored according to references

Important health, safety and environmental information

pH :	Not relevant.
Boiling point/boiling range :	Not specified.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	> 1
Water solubility :	Insoluble.
Melting point/melting range :	Not specified.
Self-ignition temperature :	Not specified.
Decomposition point/decomposition range :	Not specified.
pH in solution	~12 once the powder is mixed with water

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9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid :

- formation of dusts

Avoid contact with water (damp environment) during storage (hydraulic setting).

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

No data available.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

May cause an allergic reaction by skin contact.

Irritant effects may affect the functioning of the respiratory system and be accompanied by symptoms such as cough, suffocation , or difficulty breathing.

11.1.1. Substances

Acute toxicity :

PORTLAND CEMENT CLINKER (CAS: 65997-15-1)

Dermal route : LD50 > 2000 mg/kg
Species : Rabbit

CALCIUM CARBONATE (CAS: 471-34-1)

Oral route : LD50 > 2000 mg/kg
Species : Rat
OECD Guideline 420 (Acute Oral ToxicityFixed Dose Method)

Dermal route : LD50 > 2000 mg/kg
Species : Rat
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (n/a) : LC50 > 3 mg/l
Species : Rat

CALCIUM DIHYDROXIDE (CAS: 1305-62-0)

Oral route : LD50 > 2000 mg/kg
Species : Rat
OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)

Dermal route : LD50 > 2500 mg/kg
Species : Rabbit
OECD Guideline 402 (Acute Dermal Toxicity)

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LIMESTONE (CAS: 1317-65-3)

Oral route : LD50 > 2000 mg/kg
Species : Rat
OECD Guideline 420 (Acute Oral Toxicity Fixed Dose Method)

Dermal route : LD50 > 2000 mg/kg
Species : Rat
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (n/a) : LC50 > 3 mg/l
Species : Rat
OECD Guideline 403 (Acute Inhalation Toxicity)

Germ cell mutagenicity :

CALCIUM DIHYDROXIDE (CAS: 1305-62-0)
Ames test (in vitro) : Negative.

Carcinogenicity :

CALCIUM DIHYDROXIDE (CAS: 1305-62-0)
Carcinogenicity Test : Negative.
No carcinogenic effect.
Species : Rat

Reproductive toxicant :

CALCIUM DIHYDROXIDE (CAS: 1305-62-0)
No toxic effect for reproduction

Specific target organ systemic toxicity - repeated exposure :

CALCIUM CARBONATE (CAS: 471-34-1)
Oral route : C = 1000 mg/kg bodyweight/day
Species : Rat
Duration of exposure : 90 days
OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Inhalation route : C = 0.212 mg/litre/6h/day
Species : Rat
Duration of exposure : 90 days
OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

CALCIUM DIHYDROXIDE (CAS: 1305-62-0)
Fish toxicity : LC50 = 50.6 mg/l
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 49.1 mg/l
Duration of exposure : 48 h

NOEC = 32 mg/l
Species : Daphnia magna
Duration of exposure : 14 days

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Algae toxicity : ECr50 = 184.57 mg/l
Duration of exposure : 72 h

Aquatic plant toxicity : NOEC = 48 mg/l
Duration of exposure : 72 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

LIMESTONE (CAS: 1317-65-3)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

PORTLAND CEMENT CLINKER (CAS: 65997-15-1)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

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14.6. Special precautions for user

-

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2018/1480 (ATP 13)
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2019/521 (ATP 12)

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

- | | |
|------|--------------------------------------|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H335 | May cause respiratory irritation. |

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

GHS05 : Corrosion

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.