

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 01/27/2015

Version 1.3

SECTION 1.Identification

Product identifier

Product number 102069

Product name Calcium carbonate precipitated, suitable for use as excipient

EMPROVE® exp Ph Eur, BP, USP, E 170, FCC

CAS-No. 471-34-1

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

Identified uses Reagent for analysis, Pharmaceutical production, Cosmetic raw

material

Details of the supplier of the safety data sheet

Company EMD Millipore Corporation | 290 Concord Road, Billerica, MA 01821,

United States of America | General Inquiries: +1-978-715-4321 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)

Emergency telephone 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

24 Hours/day; 7 Days/week

SECTION 2. Hazards identification

GHS-Labeling

Not a dangerous substance according to GHS.

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Formula CaCO₃ CCaO₃ (Hill)

Molar mass 100.09 g/mol

Hazardous ingredients

Chemical Name (Concentration)

CAS-No.

Calcium carbonate (>= 90 % - <= 100 %)

471-34-1

Exact percentages are being wihtheld as a trade secret.

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SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/

shower.

Eye contact

After eye contact: rinse out with plenty of water.

Ingestion

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Not combustible.

Advice for firefighters

none

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

Environmental precautions

No special precautionary measures necessary.

Methods and materials for containment and cleaning up

Observe possible material restrictions (see sections 7 and 10).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

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SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry.

Store at $+5^{\circ}$ C to $+30^{\circ}$ C ($+41^{\circ}$ F to $+86^{\circ}$ F).

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

OSHA_TRANS

Ir	α	$r \omega r$	בוצ	nts

Basis	Value	Threshold limits	Remarks
Calcium ca	rbonate 471-34-1		

Calcium Carbonate 47 1-34-1

NIOSH/GUIDE Recommended 10 mg/m³ Form of exposure: Total

exposure limit (REL):

Recommended 5 mg/m³ Form of exposure: Respirable.

exposure limit (REL):

PEL: 15 mg/m³ Form of exposure: Total dust.

PEL: 5 mg/m³ Form of exposure: Respirable fraction.

Z1A Time Weighted Average 15 mg/m³ Form of exposure: Total dust.

(TWA):

Time Weighted Average 5 mg/m³ Form of exposure: Respirable fraction.

(TWA):

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

Eye/face protection Safety glasses

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Respiratory protection

required when dusts are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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SECTION 9. Physical and chemical properties

Physical state solid

Color light gray

Odor odorless

Odor Threshold Not applicable

pH 9.5 - 10.5

at 100 g/l 68 °F (20 °C) (slurry)

Melting point 825 °C

(decomposition)

Boiling point/boiling range Not applicable

Flash point does not flash

Evaporation rate No information available.

Flammability (solid, gas) The product is not flammable.

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Vapor pressure No information available.

Relative vapor density No information available.

Density No information available.

Relative density No information available.

Water solubility 0.014 g/l

at 68 °F (20 °C)

Partition coefficient: n-

octanol/water

No information available.

Autoignition temperature No information available.

Decomposition temperature ca.1517 °F (825 °C)

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

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Oxidizing properties none

Ignition temperature not combustible

Bulk density ca.400 - 1,400 kg/m³

SECTION 10. Stability and reactivity

Reactivity

See below

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

Possibility of hazardous reactions

Generates dangerous gases or fumes in contact with:

acids, carbon dioxide

ammonium compounds, acidic

salts, acidic

Exothermic reaction with:

Fluorine

Conditions to avoid

Strong heating (decomposition).

Incompatible materials

no information available

Hazardous decomposition products

no information available

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

Target Organs

Eyes Skin

Respiratory system

Acute oral toxicity

LD50 Rat: 6,450 mg/kg (IUCLID)

Acute inhalation toxicity

Rat: > 3 mg/l; 4 h

OECD Test Guideline 403

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Acute dermal toxicity
LD50 Rat: > 2,000 mg/kg
OECD Test Guideline 402

Skin irritation

Rabbit

Result: No irritation OECD Test Guideline 404

Eye irritation Rabbit

Result: No eye irritation OECD Test Guideline 405

Sensitization

In animal experiments: Result: negative

(Lit.)

Genotoxicity in vitro

Ames test Result: negative

(Lit.)

Mutagenicity (mammal cell test): chromosome aberration.

Result: negative

Method: OECD Test Guideline 473

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

ACGIH No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

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Further information

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

Ecotoxicity

Toxicity to algae

Growth inhibition ErC50 Desmodesmus subspicatus (green algae): > 14 mg/l; 72 h

OECD Test Guideline 201

Toxicity to bacteria

Respiration inhibition EC50 activated sludge: > 1,000 mg/l; 3 h

OECD Test Guideline 209

Respiration inhibition NOEC activated sludge: 1,000 mg/l; 3 h

OECD Test Guideline 209

Persistence and degradability

Biodegradability

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

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Additional ecological information

No ecological problems are to be expected when the product is handled and used with due care and attention.

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

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SECTION 15. Regulatory information

United States of America

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311,

Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311,

Table 117.3.

DEA List I

Not listed

DEA List II

Not listed

US State Regulations

Massachusetts Right To Know

Ingredients

Calcium carbonate

Pennsylvania Right To Know

Ingredients

Calcium carbonate

New Jersey Right To Know

Ingredients

Calcium carbonate

California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL.

KOREA: Not in compliance with the inventory

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

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Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Revision Date01/27/2015

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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