

Safety Data Sheet

KERAFLEX PLUS GRAY

Safety Data Sheet dated: 03/19/2021 - version 3

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2. Hazard identification



Classification of the product

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

May cause cancer if inhaled.

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure if inhaled.

Label elements

Pictograms and Signal Words



Danger

Hazard statements:

- H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H350 May cause cancer if inhaled.
H372 Causes damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements:

- P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P310 Immediately call a doctor.
P321 Specific treatment (see supplementary instructions on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with applicable regulations.

Other hazards

None

Ingredient(s) with unknown acute toxicity

None

3. Composition/information on ingredients

Substances

N.A.

Mixtures

Hazardous components within the meaning of WHMIS 2015 and related classification:

List of components

| Concentration (% w/w) | Name | Ident. Numb. | Classification | Registration Number |
|-----------------------|-----------------|----------------|--|---------------------|
| 50-75 % | Silica Sand | CAS:14808-60-7 | STOT RE 1, H372; Carc. 1A, H350 | |
| 25-50 % | PORTLAND CEMENT | CAS:65997-15-1 | STOT SE 3, H335; Eye Dam. 1, H318; Skin Sens. 1, H317; Skin Corr. 1A, H314 | |
| 1-2.5 % | CALCIUM FORMATE | CAS:544-17-2 | Eye Dam. 1, H318; Comb. Dust, CANH003 | |

The actual concentration of the components listed above is withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- OBTAIN IMMEDIATE MEDICAL ATTENTION.
- Remove contaminated clothing immediately and dispose of safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

- Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

- If breathing is irregular or stopped, administer artificial respiration.
- In case of inhalation, consult a doctor immediately and show him packing or label.

Most important symptoms/effects, acute and delayed

Eye irritation
Eye damages
Skin Irritation
Erythema

Indication of immediate medical attention and special treatment needed, if necessary

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

5. Fire-fighting measures

Suitable and unsuitable extinguishing media

Suitable extinguishing media:

- Water.
- Carbon dioxide (CO₂).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the hazardous product

- Do not inhale explosion and combustion gases.
- Burning produces heavy smoke.
- Hazardous combustion products: N.A.
- Explosive properties: N.A.
- Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
 Move undamaged containers from immediate hazard area if it can be done safely.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- Wear personal protection equipment.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.
- Provide adequate ventilation.
- Use appropriate respiratory protection.
- Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
- Limit leakages with earth or sand.

Methods and material for containment and cleaning up

- Take up mechanically and dispose of according to local/state/federal regulations
- Scoop into containers and seal for disposal.
- Retain contaminated washing water and dispose it.

7. Handling and storage

Precautions for safe handling

- Avoid contact with skin and eyes, inhalation of vapours and mists.
- Exercise the greatest care when handling or opening the container.
- Do not use on extensive surface areas in premises where there are occupants.
- Use localized ventilation system.
- Don't use empty container before they have been cleaned.
- Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
- Contaminated clothing should be changed before entering eating areas.
- Do not eat or drink while working.
- See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

- Storage temperature: N.A.
- Always keep in a well ventilated place.
- Keep away from food, drink and feed.
- Incompatible materials:
 - None in particular.
- Instructions as regards storage premises:
 - Cool and adequately ventilated.

8. Exposure controls/personal protection

Control parameters

List of components with OEL value

| Component | OEL Type | Country | Ceiling | Long Term mg/m3 | Long Term ppm | Short Term mg/m3 | Short Term ppm | Behaviour | Note |
|-----------------|----------|-------------|---------|-----------------|---------------|------------------|----------------|-----------|---|
| Silica Sand | ACGIH | | | 0.025 | | | | | A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis; |
| PORTLAND CEMENT | OSHA | | | 15 | | | | | |
| | OSHA | | | 5 | | | | | |
| | ACGIH | | | 1 | | | | | A4 - Not Classifiable as a Human Carcinogen;pulmonary function;respiratory symptoms;asthma; |
| | ACGIH | | | 1 | | | | | A4 - Not Classifiable as a Human Carcinogen;pulmonary function;respiratory symptoms;asthma |
| | MAK | AUSTRIA | | | 5 | | | | |
| | MAK | SWITZERLAND | | | 5 | | | | |

Appropriate engineering controls

N.A.

Individual protection measures, such as personal protective equipment (PPE)

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

Use adequate protective respiratory equipment.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Solid

Appearance and colour: powder Grey

Odour: No data available

Odour threshold: No data available

pH: No data available

pH (water dispersion, 10%): 11.00

Melting point / freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Upper/lower flammability or explosive limits: No data available

Vapour density: No data available

Vapour pressure: n/a

Relative density: 1.05 g/cm³

Solubility in water: Insoluble

Solubility in oil: No data available

Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

Solid/gas flammability: No data available

Other information

Substance Groups relevant properties No data available

Miscibility: No data available

Fat Solubility: No data available

Conductivity: No data available

10. Stability and reactivity

Reactivity

Stable under normal conditions

Chemical stability

Data not available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. Toxicological information

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Silica Sand a) acute toxicity LD50 Oral Rat = 500 mg/kg

CALCIUM FORMATE a) acute toxicity LD50 Oral Rat = 2650 mg/kg
LD50 Oral Rat = 2650 mg/kg

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
Toxicological kinetics, metabolism
and distribution information
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

Silica Sand Group 1

Substance(s) listed as OSHA Carcinogen(s):

Silica Sand

Substance(s) listed as NIOSH Carcinogen(s):

Silica Sand

Substance(s) listed on the NTP report on Carcinogens:

Silica Sand

12. Ecological information

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

List of components with eco-toxicological properties

| Component | Ident. Numb. | Ecotox Infos |
|-----------------|-----------------|--|
| Silica Sand | CAS: 14808-60-7 | a) Aquatic acute toxicity : LC50 carp > 10000.00000 mg/L 72h |
| CALCIUM FORMATE | CAS: 544-17-2 | a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio >= 1000 mg/L 96h IUCLID |

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. Disposal considerations

Safe handling and methods for disposal

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

14. Transport information

Not classified as dangerous in the meaning of transport regulations.

UN number

TDG-UN number: N.A.

ADR-UN number: N.A.

DOT-UN Number: N.A.

IATA-Un number: N.A.

IMDG-Un number: N.A.

UN proper shipping name

TDG-Shipping Name: N.A.

ADR-Shipping Name: N.A.

DOT-Proper Shipping Name: N.A.

IATA-Technical name: N.A.

IMDG-Technical name: N.A.

Transport hazard class(es)

TDG-Class: N.A.

ADR-Class: N.A.

DOT-Hazard Class: N.A.

IATA-Class: N.A.

IMDG-Class: N.A.

Packing group

TDG-Packing Group: N.A.

ADR-Packing Group: N.A.

DOT Packing Group: N.A.

IATA-Packing group: N.A.

IMDG-Packing group: N.A.

Environmental hazards

Marine pollutant: No

Environmental Pollutant: N.A.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

N.A.

Special precautions in connection with transport or conveyance

TDG:

TDG Special provisions: N/A

Department of Transportation (DOT):

N.A.

Road and Rail (ADR-RID) :

N.A.

Air (IATA) :

N.A.

Sea (IMDG) :

N.A.

15. Regulatory information

Canada - Federal regulations

DSL - Domestic Substances List

DSL Inventory:

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List

NDSL Inventory:

No substances listed

NPRI - National Pollutant Release Inventory

Substances listed in NPRI:

No substances listed

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

Silica Sand is listed in TSCA Section 8b

PORTLAND CEMENT is listed in TSCA Section 8b

CALCIUM FORMATE is listed in TSCA Section 8b

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

No substances listed

Section 304 - Hazardous substances:

No substances listed

Section 313 - Toxic chemical list:

No substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

No substances listed

CAA - Clean Air Act

CAA listed substances:

No substances listed

CWA - Clean Water Act

CWA listed substances:

No substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

Silica Sand Listed as carcinogen

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

Silica Sand

PORTLAND CEMENT

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

Silica Sand

PORTLAND CEMENT

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

Silica Sand

PORTLAND CEMENT

16. Other information

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Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any

other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

| Code | Description |
|-------------|--|
| CANH003 | May form combustible dust concentrations in air. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H335 | May cause respiratory irritation. |
| H350 | May cause cancer. |
| H350 | May cause cancer if inhaled. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H372 | Causes damage to organs through prolonged or repeated exposure if inhaled. |

Legend to abbreviations and acronyms used in the safety data sheet:

- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
- RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
- IMDG: International Maritime Code for Dangerous Goods.
- IATA: International Air Transport Association.
- IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
- ICAO: International Civil Aviation Organization.
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
- GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
- CLP: Classification, Labeling, Packaging.
- EINECS: European Inventory of Existing Commercial Chemical Substances.
- INCI: International Nomenclature of Cosmetic Ingredients.
- CAS: Chemical Abstracts Service (division of the American Chemical Society).
- GefStoffVO: Ordinance on Hazardous Substances, Germany.
- LC50: Lethal concentration, for 50 percent of test population.
- LD50: Lethal dose, for 50 percent of test population.
- DNEL: Derived No Effect Level.
- PNEC: Predicted No Effect Concentration.
- TLV: Threshold Limiting Value.
- TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
- STEL: Short Term Exposure limit.
- STOT: Specific Target Organ Toxicity.
- WGK: German Water Hazard Class.
- KSt: Explosion coefficient.

Paragraphs modified from the previous revision:

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 6. ACCIDENTAL RELEASE MEASURES
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 12. ECOLOGICAL INFORMATION