SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

CELATHIX 100 T
PE fiber-silica mixture

CAS No.: not relevant
EC No.: not relevant
INDEX No.: not relevant
REACH No.: do not require registration

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

Relevant identified uses: The product is intended for professional use.
Uses advised against: not relevant

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

EP Minerals, LLC.,
9875 Gateway Dr.,
Reno, NV 89521

Telephone: (775) 824 7600
(Monday – Friday 8:00 am PST – 5:00 pm PST)
Telefax: (775) 824 7601
Website: www.epminerals.com

1.4. Emergency telephone number

Telephone: (775) 824 7600
(Monday – Friday 8:00 am PST – 5:00 pm PST)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008 [CLP]: not relevant
Directive 67/548/EEC: not relevant
OSHA HCS/HazCom 2012 Final Rule & Appendices
Appendix C.4.30:
Hazard category: Combustible Dust
Signal word: Warning
Hazard statement: May form combustible dust concentrations in air

2.2. Label elements

Classification according to Regulation (EC) No. 1272/2008 [CLP]
not relevant

Classification according to Directive 67/548/EEC or 1999/45/EC
not relevant
2.3. Other hazards
The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

SECTION 3: Composition / information on ingredients

3.1. Substances
not relevant

3.2. Mixtures
Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance</th>
<th>EC-no.:</th>
<th>CAS-No.:</th>
<th>INDEX no.:</th>
<th>REACH-no.:</th>
<th>Concentration:</th>
<th>Classification: EC 1272/2008(CLP):</th>
<th>Classification: 67/548/EEC:</th>
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<tbody>
<tr>
<td>Polyethylene</td>
<td>not relevant</td>
<td>9002-88-4</td>
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<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
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<tr>
<td>Silica, amorphous</td>
<td>231-545-4</td>
<td>7631-86-9</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
</tr>
</tbody>
</table>

Substance with a common (EC) occupational exposure limit value

<table>
<thead>
<tr>
<th>Substance</th>
<th>EC-no.:</th>
<th>CAS-No.:</th>
<th>INDEX no.:</th>
<th>REACH-no.:</th>
<th>Concentration:</th>
<th>Classification: EC 1272/2008(CLP):</th>
<th>Classification: 67/548/EEC:</th>
</tr>
</thead>
<tbody>
<tr>
<td>not relevant</td>
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<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
</tr>
</tbody>
</table>

(Full text of R-, H- and EUH-phrases: see section 16.)

Additional information
not relevant

SECTION 4: First aid measures

4.1. Description of first aid measures
General information: When in doubt or if symptoms are observed, get medical advice.
Following inhalation: Provide fresh air.
Following skin contact: After contact with skin, wash immediately with plenty of water and soap.
After 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.
After ingestion: Rinse mouth thoroughly with water.
Let water be drunk in little sips (dilution effect).

Self-protection of the first aider: not relevant

4.2. Most important symptoms and effects, both acute and delayed
Symptoms: No known symptoms to date.
Nature of Hazard: not relevant

4.3. Indication of any immediate medical attention and special treatment needed
Notes for the doctor: Treat symptomatically.
Special treatment: Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Unsuitable extinguishing media: High power water jet.
5.2. Special hazards arising from the substance or mixture
In case of fire may be liberated: Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters
General information
Danger of dust explosion.

Special protective equipment for firefighters:
In case of fire: Wear self-contained breathing apparatus.

Additional information
Fire class A (Fires of solids, mainly organic nature, which normally burn down under glow forming).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For non-emergency personnel:
Avoid generation of dust.

For emergency responders:
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Avoid generation of dust.
See protective measures under point 7 and 8.

6.2. Environmental precautions
No special environmental measures are necessary.

6.3. Methods and material for containment and cleaning up
Take up mechanically.
Avoid generation of dust.
Do not use a dry brush as dust clouds or static can be created.

6.4. Reference to other sections
Disposal: see section 13.
Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advices on safe handling
Avoid generation of dust.

Technical measures
During filling, metering and sampling should be used if possible:
Devices with local exhaust

Precautions against fire and explosion
The product is: Combustible.
Keep away from sources of ignition. - No smoking.
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
Have fire-extinguishers in readiness before opening containers.

Additional information
Avoid: Dust deposits
Recommendations for handling:
210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
not relevant

Packaging materials
not relevant

Requirements for storage rooms and vessels
not relevant

Hints on joint storage
not relevant

Storage class: 11 Combustible solids.

Further information on storage conditions
Protect against: Humidity, Water
Relative air humidity (%): not relevant
Storage temperature: not relevant
Storage stability: in closed original container up to 2 years; open containers maximum 6 months
Maximum storage period (time): not relevant

7.3. Specific end use(s)
not relevant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit value

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.:</th>
<th>Source</th>
<th>Occupational exposure limit value:</th>
<th>Limitation of exposure peaks:</th>
<th>Remark:</th>
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</thead>
<tbody>
<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>GESTIS</td>
<td>2 mg/m³</td>
<td></td>
<td>OEL AU</td>
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<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>GESTIS</td>
<td>10 mg/m³</td>
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<td>OEL CA - Ontario</td>
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<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>GESTIS</td>
<td>6 mg/m³ inhalable aerosol 2.4 mg/m³ respirable aerosol</td>
<td></td>
<td>OEL GB</td>
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<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>GESTIS</td>
<td>6 mg/m³</td>
<td></td>
<td>OEL IE</td>
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<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>GESTIS</td>
<td>1 mg/m³</td>
<td></td>
<td>OEL NZ</td>
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<tr>
<td>Silica, amorphous</td>
<td>7631-86-9</td>
<td>GESTIS</td>
<td>80 mg/m³ % SiO₂ silica total dust</td>
<td></td>
<td>OEL US - OSHA</td>
</tr>
</tbody>
</table>

Substance with a common (EC) occupational exposure limit value

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.:</th>
<th>Source</th>
<th>Occupational exposure limit value:</th>
<th>Limitation of exposure peaks:</th>
<th>Remark:</th>
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<tbody>
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</tr>
</tbody>
</table>

DNEL-/PNEC-values

DNEL value

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.:</th>
<th>DNEL/DMEL</th>
<th>Industry</th>
<th>Professional</th>
<th>Consumer</th>
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<tbody>
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<td>not relevant</td>
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</tbody>
</table>

PNEC Value

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.:</th>
<th>PNEC</th>
<th>Worker, industry</th>
<th>Worker, professional</th>
<th>Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
</tr>
</tbody>
</table>

Risk management measures according to used control banding approach
not relevant
Additional information
not relevant

8.2. Exposure controls
Occupational exposure controls
Respiratory protection necessary at: Dust formation.
General protection and hygiene measures
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Personal protection equipment
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Respiratory protection
Suitable respiratory protection apparatus: Filtering Half-face mask (DIN EN 149)
Half-face mask or quarter face piece: maximum use concentration for substances with exposure limits:
P1 filter: up to a max. of 4 times the exposure limit.
P2 filter: up to a max. of 10 times the exposure limit.
P3 filter: up to a max. of 30 times the exposure limit
Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.
If the concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection
Hand protection is not required

Eye/face protection
Dust protection eye glasses.

Body protection
Body protection: not applicable.

Environmental exposure controls
Refer to chapter 7. No further action is necessary.

Consumer exposure controls
not relevant

Exposure Scenario
not relevant

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Appearance
Physical state: Powder
Colour: white
Odour: odourless
Odour threshold: not relevant

Safety relevant basis data
Parameter | unit | remark
--- | --- | ---
Density: | approx. 1.6 | g/cm³
Bulk density: | not determined
pH: 7
Melting point/freezing point: not determined
Initial boiling point and boiling range: not applicable
Flash point: not determined
Flammability (solid, gas): dust explosive,
Explosivity:
  Lower explosion limit: 30 g/m³
  Upper explosion limit: 11,000 g/m³
Ignition temperature: not determined
Decomposition temperature: not determined
Oxidizing potential: not oxidizing.
Vapour pressure: not relevant
Vapour density: not relevant
Evaporation rate: not relevant
Water solubility: insoluble
Fat solubility: insoluble
Soluble in: not relevant
Partition coefficient
n-octanol/water: not applicable
Viscosity: not applicable
Solvent separation test: not applicable
Solvent content: not relevant

9.2. Other information
not relevant

SECTION 10: Stability and reactivity

10.1. Reactivity
not relevant

10.2. Chemical stability
not relevant

10.3. Possibility of hazardous reactions
not relevant

10.4. Conditions to avoid
Decomposition takes place from temperatures above: 330 °C
Keep away from sources of ignition. - No smoking.

10.5. Incompatible materials
not relevant

10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide (CO2)

Additional information
not relevant

SECTION 11: Toxicological information

11.1. Information on toxicological effects
not relevant
Acute toxicity

<table>
<thead>
<tr>
<th>Substance:</th>
<th>CAS-No.:</th>
<th>Toxicological information</th>
</tr>
</thead>
<tbody>
<tr>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
</tr>
</tbody>
</table>

Specific symptoms in laboratory animals
No information available.

Irritation and etching
- Irritant effect on the skin
  - slightly irritant but not relevant for classification.
- Irritant effect on the eye
  - slightly irritant but not relevant for classification.
- Irritant effect on the respiratory tract
  - slightly irritant but not relevant for classification.
- Caustic effect
  - not corrosive

Sensitization
not sensitising.

Repeated dose toxicity (subacute, subchronic, chronic)
No information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Carcinogenicity
  - No indication of human carcinogenicity.
- Germ cell mutagenicity
  - No indications of human germ cell mutagenicity exist.
- Reproductive toxicity
  - No indications of human reproductive toxicity exist.

General remarks
not relevant

Practical experience/human evidence
not relevant

Other observations
not relevant

Other information
Damage can be caused through mechanical influence of the product (e.g. sticking).

SECTION 12: Ecological information

12.1. Toxicity
not relevant

Eco toxicity

<table>
<thead>
<tr>
<th>Substance:</th>
<th>CAS-No.:</th>
<th>Eco toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
</tr>
</tbody>
</table>

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

12.3. Bio accumulative potential
No indication of bioaccumulation potential.

12.4. Mobility in soil
not relevant
12.5. Results of PBT and vPvB assessment
not relevant

12.6. Other adverse effects
not relevant

Further ecological information
According to the present state of knowledge negative ecological effects are not expected.

Further details
not relevant

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Appropriate disposal/Product
Dispose of waste according to applicable legislation.

Appropriate disposal / Package
Completely emptied packages can be recycled.

List of proposed waste codes/waste designations in accordance with EWC

Waste code product: 07 02 99 - wastes not otherwise specified
Waste code packaging: 15 01 06 - mixed packaging

Remark
The allocation of waste identity numbers/waste descriptions must be carried out according to the EWC, specific to the industry and process.

SECTION 14: Transport information

14.1. UN number
not relevant

14.2. UN proper shipping name
not relevant

14.3. Transport hazard class(es)
not relevant

14.4. Packing group
not relevant

14.5. Environmental hazards
not relevant

14.6. Special precautions for user
Land transport (ADR/RID)
Remark: No dangerous good in sense of this transport regulation.

Sea transport (IMDG)
Remark: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI / IATA-DGR)
Remark: No dangerous good in sense of this transport regulation.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Remark: not relevant

SECTION 15: Regulatory information

Labeling
Hazardous component(s) for labelling
not relevant

Special labelling of particular preparations
not relevant

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

EU legislation
Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).
not relevant

Regulation (EC) No 2037/2000 concerning materials, which cause damage to the ozone layer.
not relevant

Regulation (EC) No. 648/2004 (Detergents regulation)
not relevant

National regulations
Observe in addition any national regulations!

Restrictions of occupation
not relevant

Storage class
11 Combustible solids.

Water hazard class (WGK)
not a water pollutant (nwg)

Other regulations, restrictions and prohibition regulations
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

15.2. Chemical Safety Assessment
For this preparation a chemical safety assessment has been carried out: No

SECTION 16: Other information

Relevant R-, H- and EUH-phrases (Number and full text)
not relevant

Training advice
not relevant

Recommended restrictions of use
not relevant

Further remarks
The above information describes exclusively the safety requirements of the product and is based on our
present-day knowledge.
The information is intended to give you advice about the safe handling of the product named in this safety
data sheet, for storage, processing, transport and disposal.
The information cannot be transferred to other products.
In the case of mixing the product with other products or in the case of processing, the information on this
safety data sheet is not necessarily valid for the new made-up material.

**Documentation of changes**
- Data changed compared with the previous version

**Key literature references and sources for data**
Data arise from reference works and literature.
GESTIS- substances data base
Directive 67/548/EEC
Directive 1999/45/EC
Regulation (EC) 1272/2008 (CLP)

**Abbreviations and acronyms**
EWC = European Waste Catalogue