Name of the product: Cellulose
Version 1
Preparation date: January 4, 2011

1. Identification of the Substance / Mixture and the Company / Undertaking

1.1. Product identifier
Cellulose

REACH Registration number: Exempted according to Annex V.7.
Trade names: Pre-co-Floc® PB40, PB40M, PB33, PB33C, PB100M, PB200M, PB300M, PB20, PB20M, PB900, NB10
Chemical name/synonyms: Powered Cellulose

1.2. Relevant identified uses of the substance or mixture and uses advised against
Filter aid; industrial additive, coatings, moldings, enzyme production

1.3. Details of the supplier of the safety data sheet
EP Minerals Europe GmbH & Co, KG (importer/distributor), Rehrhofer Weg 115 D-29633, Munster, Germany, ph. no. +49.51.92.9897.0, email address EPME@epminerals.com
EP Minerals, LLC (manufacturer), 9785 Gateway Drive, Suite 1000, Reno, Nevada 89521 (manufacturer), ph no. +1-775-824-7600, email address inquiry.minerals@epminerals.com

1.4. Emergency telephone number
Emergency telephone number: +49.51.92.9897.0 (available only during EU working hours); +1-775-824-7600 (available 8 am – 5 pm PST)

2. Hazards Identification

2.1. Classification of the substance or mixture
This product does not meet the criteria for classification as hazardous as defined in the Regulation EC 1272/2008 and in Directive 67/548/EEC.

2.2. Label elements
None

2.3. Other hazards
Acute inhalation can cause dryness of the nasal passage and lung congestion, coughing and general throat irritation. Chronic inhalation of dust should be avoided. May cause irritation (tear formation and redness) if dust gets in eyes. Although not absorbed by the skin, may cause dryness if prolonged exposure. Ingestion of small to moderate quantities is not considered harmful, but may cause irritation of the mouth, throat and stomach.
3. Composition / Information on Ingredients

3.1. Main constituent:

<table>
<thead>
<tr>
<th>Name</th>
<th>% by weight</th>
<th>CAS-No</th>
<th>EINECS No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellulose</td>
<td>100%</td>
<td>9004-34-6</td>
<td>none</td>
</tr>
</tbody>
</table>

3.2. Impurities:

None

4. First aid measures

4.1. Description of first aid measures

**Eye contact**
Rinse with copious quantities of water and seek medical attention if irritation persists.

**Ingestion**
Drink generous amounts of water to reduce bulk and drying effect.

**Inhalation**
Movement to fresh air is recommended. Blow nose to evacuate dust.

**Skin contact**
Wash skin with soap and water. Use suitable lotion to moisturize skin if dryness occurs.

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

Acute inhalation can cause dryness of the nasal passage and lung congestion, coughing and general throat irritation. Chronic inhalation of dust should be avoided. Ingestion of moderate quantities may cause irritation to the mouth, throat and stomach.

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

No specific actions are required, however movement to fresh air is recommended and blow nose to evacuate dust.

5. Fire-fighting measures

5.1. Extinguishing media
Dry chemical powder, water spray, fog or foam may be used as needed to extinguish fire. Do not use water jet.

5.2. Special hazards arising from the substance or mixture
Substance is flammable in presence of open flames and sparks and may combust when combined with strong oxidizing agents, such as pentafluoride, acetic acid and sodium nitrite. May be spontaneously combustible at high temperatures. Contact between cotton and fluorine may result in violent explosion. Excess dust generation may create explosion hazard. The minimum explosible concentration is 0.045 g/l.

5.3. Advice for fire-fighters
Do not use water jet to extinguish fire. Instead use dry chemical powder, water spray, fog or foam as necessary.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid airborne dust generation. Wear personal protective equipment in compliance with national legislation. Protect eyes with goggles.

6.2 Environmental precautions
Finish cleaning spill by spreading water on contaminated surface and dispose of in accordance with national legislation.

6.3 Methods and material for containment and cleaning up
Use water spraying or vacuum cleaning systems to prevent airborne dust generation. Wear personal protective equipment in compliance with national legislation.

6.4. Reference to other sections
See sections 8 and 13.

7. Handling and Storage

7.1. Precautions for safe handling
Keep away from heat and sources of ignition. Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment. Handle packaged products carefully to prevent accidental bursting.

7.2. Conditions for safe storage, including any incompatibilities
Keep container in a cool, well-ventilated area away from sources of ignition. Do not store above 25°C (77°F). Keep container tightly closed. Minimize airborne dust generation and prevent wind dispersal during loading and unloading. Store in a dry place to maintain packaging integrity and product quality. Observe all label precautions and warnings.

7.3. Specific end Use(s)
If you require advice on specific uses, please contact your supplier.

8. Exposure controls / Personal protection

8.1. Control parameters
Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust) in compliance with applicable national legislation.

8.2. Exposure controls

| Occupational Exposure Control | Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne particles below the exposure limit. |
| Eye/Face protection | Wear safety glasses with side-shields in circumstances where there is a risk of penetrative eye injuries. |
| Skin protection | Appropriate protection (e.g. gloves, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. Wash hands at the end of each work session. |
| Respiratory protection | In case of prolonged exposure to airborne dust concentrations, wear respiratory protective equipment that complies with the requirements of European and national legislation. |
| Environmental Exposure Control | Avoid wind dispersal. |

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Appearance, Color | White to off-white powder | Odor | Odorless |
| Physical State | Solid | pH (10% SUSPENSION) | 5.0 – 7.5 |
| Vapor Pressure | Not applicable | Vapor Density | Not applicable |
| Boiling Point | Decomposes | Melting Point | Not applicable |
| Flash Point | Not applicable | Flammability | Not applicable |
| Flammability Limits | Not applicable | Autoignition Temperature | 500°C (932°F) |
| Decomposition Temperature | 200°C | Spec. Gravity/Relative Density | 0.2 – 0.4 |
| Evaporation Rate | Not applicable | COEFF. – Water/Oil | Not applicable |
| Odor Threshold | Not applicable | Solubility – Water | Insoluble in water |
9.2. Other information
Not applicable

10. Stability and Reactivity

10.1 Reactivity
Not reactive

10.2 Chemical Stability
Substance is stable.

10.3 Possibility of hazardous reactions
Excessive heat; incompatible materials.

10.4 Conditions to Avoid
Keep away from heat, open flames and other sources of ignition. Avoid airborne dust generation. Excess dust generation may create explosion hazard.

10.5 Incompatible Materials
Do not combine with strong oxidizing agents, such as pentafluoride, acetic acid and sodium nitrite. Contact between cotton and fluorine may result in violent explosion.

10.6 Hazardous decomposition products
CO, CO2.

11. Toxicological information

11.1 Information on toxicological effects
a. Acute toxicity: Not available.
b. Skin corrosion/ irritation: Not available.
c. Serious eye damage/ irritation: Not available.
d. Respiratory or skin sensitization: Not available.
e. Germ cell mutagenecity: Not available.
f. Carcinogenicity: Not available.
g. Reproductive toxicity: Not available.
h. STOT – Single exposure: Based on available data, the classification criteria are not met.
i. STOT – Repeated exposure: Based on available data, the classification criteria are not met.
j. Aspiration hazard: Not available.

12. Ecological information

12.1. Toxicity
Not available.

12.2 Persistence and degradability
Long term degradation may occur.

12.3 Bioaccumulative potential
Little potential for bioaccumulation

12.4 Mobility in soil
Not available.

12.5 Results of PBT and vPvB assessment
Not available.

12.6 Other adverse effects
This product is not toxic.

13. Disposal considerations

13.1. Waste treatment methods
WASTE FROM RESIDUES / UNUSED PRODUCTS
Where possible, recycling is preferable to disposal. Dispose of in accordance with applicable national legislation.
Packaging
Dust formation from residues in packaging should be avoided and suitable worker protection assured. Store used packaging in enclosed receptacles. Recycling and disposal of packaging should be carried out in compliance with national regulations. The re-use of packaging is not recommended. Repair all broken bags. Recycling and disposal of packaging should be carried out by an authorized waste management company.

14. Transport information

14.1. UN number
Not relevant

14.2. UN proper shipping name
The substance is not listed on the Dangerous Goods list.

14.3. Transport hazard class
ADR: Not classified
IMDG: Not classified
ICAO/IATA: Not classified
RID: Not classified

14.4. Packaging group
Not relevant

14.5. Environmental hazards
Not relevant

14.6. Special precautions for users
No special precautions

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No special transport classification in effect.

15. Regulatory information

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

United States (federal and state)
California Proposition 65: This product is not listed.

HMIS Rating: Health 1 Fire 1 Reactivity 0 Personal Protection E
NFPA Rating: Health 1 Flammability 1 Reactivity 0 Specific Hazard 0

Canada
WHMIS Classification: This product is not controlled under WHMIS.

Europe
This product is not subject to specific national legislation regulating hazardous substances.

15.2 Chemical safety assessment
Exempted from REACH Registration in accordance with Annex V.7.

16. Other information

Indication of the changes made to the previous version of the SDS
Not relevant.

Training
Workers should be trained in the proper use and handling of this product as required under applicable nationally regulations.
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