MATERIAL SAFETY DATA SHEET
PIONEER TALC

EFFECTIVE DATE: January 1, 2003
PREVIOUS ISSUE: November 1, 2000

REGULATORY COMPLIANCE:
• British Legislation, CHIP
• EC-directive 93/112/EC & 91/155/EC
• EC 67/548 (R51) & (R53)

1. IDENTIFICATION OF THE SUBSTANCE/PREP. AND THE COMPANY
PRODUCT NAME: PIONEER TALC
MANUFACTURER'S NAME: SUZORITE MINERAL PRODUCTS, INC./ ZEMEX INDUSTRIAL MINERALS, INC.
ADDRESS: I-10 Exit 129, Allamore, TX 79855 USA
TELEPHONE NO.: (915) 283-2330

2. COMPOSITION/INFORMATION ON INGREDIENTS
CHEMICAL NAME: Talc
PRODUCTS NAMES: 767, MB-92, 926, 2606, 2610, 2655, 2661, 2664, 2720, 2871, 2882, 2893, 4304, 4306, 4317, 4319, 4320, 4392, 4404, 4411, 4416.
CHEMICAL FAMILY: Magnesium Silicate
FORMULA: Mg₃Si₄O₁₀(OH)₂
CAS No.: 14807-96-6
WEIGHT: 97-100 

Pioneer talc is a naturally occurring mineral, which may contain varying amounts of the following minerals:
Chlorite: CAS # 1318-59-8, 0-2 %
Calcite: CAS # 13397-26-7, 0-2 %

3. HAZARDS IDENTIFICATION
• Talc is not listed as a carcinogen by OSHA, NTP or IARC however Pioneer talc contains crystalline silica at levels greater than 0.1 %, but less than 2 %.
• CARCINOGENICITY: OSHA, NTP or IARC do not list talc itself as a carcinogen. However, IARC Evaluation Of The Carcinogenic Risk To Humans, Volume 68, 1997 concludes that there is sufficient evidence of the carcinogenicity of crystalline silica in humans, and has, therefore, classified crystalline silica in Group 1, Carcinogenic to Humans. The National Toxicology Program’s (“NTP’s”) Ninth Annual Report on Carcinogens 2000, lists crystalline silica (respirable) as a substance which is known to be a human carcinogen.

4. FIRST AID MEASURES
No special procedures are required. Some eye, mucous membrane and skin sensitivity may occur with allergic individuals. First aid consists of washing away dust. In case of discomfort by dust, move to a ventilated area and consult a physician.

Eyes: Wash eyes with large amount of water or saline solution. If irritation or redness develops, get medical attention.

Ingestion: Give large quantities of water to induce vomiting, keep head lower than hips to prevent aspiration. Get medical help.

5. FIRE-FIGHTING MEASURES
Talc is not flammable.

6. ACCIDENTAL RELEASE MEASURES
Talc waste is not reactive, flammable or biodegradable. Use conventional means; e.g. sweeping, vacuum, etc. Use caution on wet floor, as it may be slippery.

7. HANDLING AND STORAGE
Avoid dust formation. Keep container tightly closed.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
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</thead>
<tbody>
<tr>
<td>Table Z-3</td>
<td>RESPIRABLE DUST (TWA-8 Hours Period)</td>
</tr>
<tr>
<td>20 mppcf (2 mg/cu. meter)</td>
<td>2 mg/cu. meter</td>
</tr>
<tr>
<td>Quartz: (Respirable) 0.1 mg/cu. meter/%SiO₂</td>
<td>(Respirable) 0.05 mg/cu. meter</td>
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</tbody>
</table>
The exposure limits of TALC are shown in Table Z-3-Mineral Dust, published by OSHA (29 CFR 1910.1000) USA.

**RESPIRATORY PROTECTION:** NIOSH approved dust respirator should be used when level exceeds TLV.

**VENTILATION:** Normal air circulation, use adequate ventilation for low TLV

**LOCAL EXHAUST:** Collect excessive dust at point of generation

**PROTECTIVE GLOVES & EYE PROTECTION:** Impermeable gloves and Eye protective glasses are recommended.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

- **DECOMPOSITION POINT:** ~10000 °C (18300 °F)
- **SPECIFIC GRAVITY (WATER=1):** 2.5-2.8
- **SOLUBILITY IN WATER:** Insoluble
- **% VOLATILE BY VOL:** Non-Volatile
- **HARDNESS:** 1 MOHS
- **APPEARANCE:** White to Off-white powder
- **ODOR:** Odorless
- **EVAPORATION RATE (BUTYL ACET.,=1):** N/A

10. **STABILITY AND REACTIVITY**

- **CHEMICAL STABILITY:** Stable
- **CONDITIONS TO AVOID:** None
- **MATERIALS TO AVOID:** Strong acids and alkalis
- **HAZARDOUS DECOMPOSITION PRODUCTS:** None

11. **TOXICOLOGICAL INFORMATION**

- **POTENTIAL HEALTH EFFECTS (ACUTE & CHRONIC):** May cause eye and skin irritation. Ingestion may cause gastrointestinal irritation, nausea and diarrhea. Long term exposure to high amount of talc without the approved dust mask may lead to chronic cough and dyspepsia.

12. **ECOLOGICAL INFORMATION**

- **Ecotoxicity Effects:** No known effect on environment or expected under normal use.

13. **DISPOSAL CONSIDERATIONS**

- **WASTE DISPOSAL METHOD:** Use normal solid waste, disposal methods to comply with Federal and local laws.

14. **TRANSPORT INFORMATION**

- Not classified as dangerous material by DOT. No special precautions are required.

15. **REGULATORY INFORMATION**

- **Canadian WHMIS:** D2A
- **CANADIAN DOMESTIC SUBSTANCES LIST:** As a naturally occurring substance, talc is considered to be on the Canadian DSL.
- **CERCLA:** 40 CFR Part 302, Table 302.4 Talc is not listed. Notification of the spill is not required.
- **EPA- TCLP:** 40 CFR Part 261-24,appendix II- Table 1, No noticeable amount of Toxic substances leaches out.
- **RCRA:** Talc is not classified as a hazardous waste under Section 3001 of RCRA, and under regulation 40 CFR Part 261.4 (b)(7).
- **SARA TITLE III:** This product is not subject to SARA Title III
- **TSCA CHEMICAL SUBSTANCES INVENTORY:** Talc is listed, CAS # 14807-96-6
- **Conformance of Talc to FDA regulations:** Please note that talc meets the FDA criteria covering the safe use of talc in articles intended for food contact use.
  - 21 CFR 73.1550 Color Additive
  - 21 CFR 175.300(b)(3)(xxvi) Resinous and Polymeric Coatings
  - 21 CFR 182.70 &
  - 21 CFR 182.90 Food Contact Surface Component
  - Talc meets Food Chemical Codex (FCC) specifications and can be used as a direct or indirect food additive.

16. **OTHER INFORMATION**

- **NPCA / CPMA HMIS Ratings:**
  - **HEALTH:** 1
  - **FLAMMABILITY:** 0
  - **REACTIVITY:** 0
  - **PERSONAL PROTECTION:** E

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