



PEL means OSHA Permissible Exposure Limit.

TLV means American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value.

MSHA means Mine Safety and Health Administration Exposure Limit.

TWA means 8 hour time weighted average.

Note: The Permissible Exposure Limits (PEL) reported above are the pre-1989 limits that were reinstated by OSHA June 30, 1993 following a decision by the 11th Circuit Court of Appeals. These PELs are now being enforced by Federal OSHA. Be aware that more restrictive exposure limits may be enforced by some states, agencies or other authorities.

### **SECTION 3                      PHYSICAL DATA**

|  |  |
|--|--|
| BOILING POINT (°F)<br>Not Applicable     | SPECIFIC GRAVITY (H <sub>2</sub> O = 1)<br>1.7     |
| VAPOR PRESSURE (mm Hg)<br>Not Applicable | VAPOR DENSITY (AIR = 1)<br>Not Applicable          |
| EVAPORATION RATE<br>Not Applicable       | SOLUBILITY IN WATER<br>Negligible                  |
| APPEARANCE AND ODOR<br>Black Powder      | DENSITY @ 20° C:<br>UNCOMPACTED: 52 lbs/cubic foot |

### **HAZARDOUS MATERIALS IDENTIFICATION**

#### **DEGREE OF HAZARD**

|                        |                   |
|------------------------|-------------------|
| <u>1</u> Health Hazard | 4 = EXTREME       |
| <u>1</u> Flammability  | 3 = High          |
| <u>0</u> Reactivity    | 2 = Moderate      |
|                        | 1 = Slight        |
|                        | 0 = Insignificant |

### **SECTION 4                      FIRE AND EXPLOSION DATA**

|  |   |
|--|---|
| Autoignition Temperature 302°F<br>Fire Hazard: Moderate When Exposed | Explosion Hazard:<br>Slight when exposed to flame |
|--|---|

### **SECTION 5                      HEALTH HAZARD DATA**

CARCINOGENICITY - SEE ROUTES OF EXPOSURE AND EFFECTS

(BELOW)

ACUTE

ACUTE

OREAL

DERMAL

LD<sub>50</sub>LD<sub>50</sub>

ND

ND

**ROUTES OF EXPOSURE AND EFFECTS**

**Inhalation:** Breathing prolonged and excessive amounts of Leonardite dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may have the following serious chronic health effects:

**Pneumoconiosis:** Excessive inhalation of respirable dust may cause pneumoconiosis, a respiratory disease, which can result in delayed, progressive, disabling and sometimes fatal lung injury. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with pneumoconiosis are predisposed to develop tuberculosis.

**Cancer Status:** The International Agency for Research on Cancer has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1 - carcinogenic to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (published in June 1997) in conjunction with the use of these materials. The National Toxicology Program classifies respirable crystalline silica as "known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

**Other Data with Possible Relevance to Human Health:**

There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease

endpoints such as scleroderma (an immune system disorder manifested by fibrosis of the lungs, skin and other internal organs) and kidney disease.

For further information consult "Adverse Effects of Crystalline Silica Exposure" published by the American Thoracic Society Medical Section of the American Lung Association, American Journal of Respiratory and Critical Care Medicine Volume 155, pages 761-768, 1997.

|   |                                 |  |
|---|---------------------------------|--|
| SKIN<br>Potential irritant.   | EYE<br>Potential irritant.      | INHALATION<br>Irritation to lungs, nose, and throat. |
| <b>EMERGENCY FIRST AID PROCEDURES</b>   |                                 |  |
| EYES: Flush with water.   | SKIN: Wash with soap and water. |  |
| If inhaled and effects occur, move to fresh air. If breathing is irregular, administer oxygen |                                 |  |

## **SECTION 6                      REACTIVITY DATA**

|  |   |
|--|---|
| CONDITIONS CONTRIBUTING TO INSTABILITY<br>Stable | INCOMPATIBILITY<br>Oxidizing materials      |
| HAZARDOUS DECOMPOSITION PRODUCTS<br>None         | HAZARDOUS POLYMERIZATION<br>Will not occur. |

## **SECTION 7                      SPILL OR LEAK PROCEDURES**

### **STEPS TO TAKE IF MATERIAL IS RELEASED OR SPILLED**

If uncontaminated, sweep up or collect, and reuse product.

### **WASTE DISPOSAL METHOD**

Can be disposed of in approved landfill.

### **NEUTRALIZING CHEMICALS**

Not Applicable

## **SECTION 8                      SPECIAL PROTECTION INFORMATION**

### **RESPIRATORY PROTECTION**

Use NIOSH approved mechanical filter respirator for nontoxic dusts if dust

concentration exceeds  $10\text{mg}/\text{m}^3$

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#### VENTILATION

Sufficient to keep dust levels below the TLV for crystalline silica.

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#### PROTECTIVE GLOVES

General duty work gloves.

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#### EYE PROTECTION

If high dust conditions exist, tight fitting goggles are recommended.

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#### OTHER PROTECTIVE EQUIPMENT

Eyewash

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### **SECTION 9            SPECIAL PRECAUTIONS**

#### **PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

Store out of the weather.

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#### OTHER PRECAUTIONS

None

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DATE: FEBRUARY,  
2001

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