DIATOMACEOUS EARTH DE125

SECTION 1: CHEMICAL PRODUCT

Product Name: Celatom FW-12, FW-14, FW-18, FW-20, FW-40, FW-50, FW-60, FW-70, FW-80, SP
Chemical Family: Silica
General Use: Filter Aid
CHEMICAL NAME: Diatomaceous Earth, Flux-Calcined

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS#</th>
<th>Ingredient Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diatomaceous Earth, Flux-Calcined (kieselguhr)</td>
<td>68855-54-9</td>
<td>APPROXIMATE CONCENTRATION: 100%</td>
</tr>
<tr>
<td>EINECS: 272-489-0 EC Index Number: 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crystalline Silica (Cristobalite)</td>
<td>14464-46-1</td>
<td>APPROXIMATE CONCENTRATION: 35-50%</td>
</tr>
<tr>
<td>EINECS: 238-455-4 EC Index Number: 1</td>
<td>Risk Phrases: R48/20</td>
<td></td>
</tr>
</tbody>
</table>

EINECS: 238-455-4 EC Index Number: 1 Risk Phrases: R48/20
SECTION 3 : HAZARDS IDENTIFICATION

Physical State: Low density powder.
Color: White
Odor: There is no distinctive odor.
Environment Hazards: There are no significant environmental effects.

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29CFR 1910.1200)

Applies to All Ingredients:
Route of Exposure: See below
Potential Health Effects: See below and Section 11 for additional information
Eye Contact: May cause irritation (tear formation and redness) if dust gets in eyes.
Skin Contact: Not absorbed by the skin, but may cause dryness if prolonged exposure.
Inhalation: 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: Ingestion of small to moderate quantities is not considered harmful, but may cause irritation of the mouth, throat and stomach.

Chronic Health Effects: Chronic inhalation of crystalline silica dust in excess of the Threshold Limit Value (TLV) recommended by the American Conference of Governmental Industrial Hygienists (ACGIH)(.025mg/m3) or in excess of the Permissible Exposure Limit (PEL) established by OSHA (.050mg/m3), over a prolonged number of years may contribute to silicosis. Crystalline silica, when inhaled as respirable dust, has been classified in a 1997 monograph (Volume 68, "Silica") of the International Agency for Research on Cancer (IARC) as carcinogenic to humans over prolonged and sustained exposure.

Aggravation of Pre-Existing Conditions: Pre-existing diseases of the upper respiratory tract and lung such as bronchitis, emphysema, and asthma.

SECTION 4 : FIRST AID MEASURES

Eye Contact: Flush eyes with generous quantities of water or eye rinse solution. Consult physician if irritation persists.
Skin Contact: Use moisture renewing lotions if dryness occurs.
Inhalation: Remove to fresh air. Blow nose to evacuate dust.
Ingestion: Drink generous amounts of water to reduce bulk and drying effects.
Note to Physicians: No special notes.
Antidote: Not applicable
SECTION 5 : FIRE FIGHTING MEASURES

Fire:
- FLAMMABILITY: This material is not flammable.
- FLAMMABILITY LIMITS: Not applicable

Explosion:
- EXPLOSION DATA: Not applicable, the material is not explosive.

Flash Point:
- Not applicable

Auto Ignition Temperature:
- Not applicable

Extinguishing Media:
- Not applicable, the material is not flammable.

Hazardous Combustion Byproducts:
- Not applicable, the material does not combust.

Fire Fighting Instructions:
- Not applicable, the material is not flammable.

Protective Equipment:
- Not applicable, the material is not flammable.

NFPA
- Health: 1
- Flammability: 0
- Reactivity: 0
- Other:
- SPECIFIC PHYSICAL AND CHEMICAL HAZARDS: Not applicable, the material is not flammable.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal Precautions:
- If dust is present, use respirator fitted with particulate filter as specified in Section 8. Protect eyes with goggles.

Spill Cleanup Measures:
- Vacuum clean spillage, wet sweep or wash away. Avoid creating dust.

Environmental Precautions:
- This material is not a significant environmental concern.

SECTION 7 : HANDLING and STORAGE

Handling:
- Minimize dust generation. Avoid contact with eyes. Avoid breathing dust. Repair or dispose of broken bags.

Storage:
- Store in a dry place to maintain packaging integrity and product quality. Do not store near hydrofluoric acid. Observe all label precautions and warnings.
SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Local – Control dust within recommended TLV/PEL. Refer to ACGIH publication “Industrial Ventilation” or similar publications for design of ventilation systems.

Personal Protective Equipment Routine Handling: See below

Skin Protection Description: No special equipment is needed.

Eye/Face Protection: Goggles to protect from dust

Respiratory Protection: Respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present. If the dust concentration is less than ten (10) times the Permissible Exposure Limit (PEL) use a quarter or half-mask respirator with a N95 dust filter or a single use dust mask rated N95. If dust concentration is greater than ten (10) times and less than fifty (50) times the PEL, a full-face piece respirator fitted with replaceable N95 filters is recommended. If dust concentration is greater than fifty (50) and less than two hundred (200) times the PEL use a power air-purifying (positive pressure) respirator with a replaceable N95 filter. If dust concentration is greater than two hundred (200) times the PEL use a type C, supplied air respirator (continuous flow, positive pressure), with full face piece, hood or helmet.

Exposure Limits:
Component: Diatomaceous Earth, Flux-Calcined (kieselguhr)
OSHA PEL: See below
ACGIH TLV: See below
MSHA PEL: See below
NIOSH REL: See below

Component: Crystalline Silica (Cristobalite)
OSHA PEL: 0.050 mg/m3
ACGIH TLV: 0.025 mg/m3
MSHA PEL: 0.5*10/(% respirable crystalline silica +2)
NIOSH REL: 0.050 mg/m3

GENERAL HYGIENE: Avoid breathing dust. Avoid contact with eyes. Wash hands after handling and before eating or drinking.

For sampling silica dusts refer to NIOSH Analytical Method 7500 or OSHA method ID 142

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State/Appearance: Powder
Color: Light pink to white
Odor: Odorless
Physical State: Solid
pH: (10% SUSPENSION): 10
Decomposition Temperature: > 1300 deg C
Vapor Pressure: Not applicable
Vapor Density: Not applicable
Flash Point: Not applicable
Auto Ignition Temperature: Not applicable
Boiling Point: Not applicable
Melting Point: > 1300 deg C
Solubility: WATER: < 1%
Specific Gravity: 2.3
Density: 2.3
Evaporation Point: Not applicable
Odor Threshold: Not applicable
Coefficient of Water/Oil Distribution: COEFF. – WATER / OIL: Not applicable
FLAMMABILITY LIMITS: Not applicable

FLAMMABILITY: Not applicable
SECTION 10 : STABILITY and REACTIVITY

Chemical Stability: Material is stable.
Conditions to Avoid: Not applicable
Incompatibilities with Other Materials: Hydrofluoric acid. Products containing silica may react violently with hydrofluoric acid.
Reactivity: Material is not reactive.
Hazardous Decomposition Products: Not applicable

SECTION 11 : TOXICOLOGICAL INFORMATION

Applies to All Ingredients:
Routes of Exposure: Inhalation (chronic)
Acute Health Effects: LD50: Not available
Chronic Effects: IMMEDIATE AND DELAYED EFFECTS: No immediate effects. See CHRONIC EFFECTS for potential long-term effects when prolonged exposure to levels of crystalline silica in excess of OSHA PEL and ACGIH TLV.
Carcinogenicity: Flux-calcined diatomaceous earth (Kieselguhr) is composed of amorphous and crystalline silica. Amorphous silica is not classifiable as carcinogenic to humans. Crystalline silica, when inhaled as respirable dust, has been classified as carcinogenic to humans over prolonged and sustained exposure. Long-term inhalation of respirable crystalline silica may contribute to the respiratory disease "silicosis", a non-cancerous lung disease. In a 1997 monograph (Volume 68, "Silica"), the International Agency for Research on Cancer (IARC) concluded that overall the epidemiological findings support increased risk of lung cancer from inhaled crystalline silica resulting from occupational exposure (classified in Group 1), while there was inadequate evidence in humans for the carcinogenicity of amorphous silica (classified in Group 3).
Mutagenicity: Not available
Teratogenicity: Not available
Sensitization: Not applicable
Reproductive Toxicity: Not available
Irritation: Not applicable
Other Toxicological Information: SYMPTOMS: Not available
CORROSIVENESS: Not applicable
TOXICOLOGICALLY SYNERGISTIC PRODUCTS: Inhaled smoke from tobacco products (chronic).

SECTION 12 : ECOLOGICAL INFORMATION

Ecological Paragraph: CHARACTERISTICS: Non-biodegradable, inert, with little potential for bioaccumulation.

POSSIBLE EFFECTS: Diatomaceous earth products have shown some efficacy as a natural insecticide, but otherwise have no demonstrated toxicity in regards to aquatic or terrestrial life.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal: If this material as supplied becomes a waste, use solid waste disposal common to landfill type operations or in slurry to sumps. Not considered a hazardous waste under RCRA (40CFR Part 261).
PACKAGING DISPOSAL: Dispose of in accordance with applicable laws and regulations, typically solid waste disposal common to landfill type operations.
SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Information: BASIC SHIPPING INFORMATION:
DOT shipping classification 55 (no restrictions). Technical name is “Diatomaceous Earth”.
ADDITIONAL INFORMATION: No special requirements or placarding necessary.

SECTION 15 : REGULATORY INFORMATION

Applies to All Ingredients :

SARA: SARA TITLE III: Not listed.
OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29CFR 1910.120)

Canada WHMIS: WHMIS Ingredient Disclosure List: Included for disclosure at 1% or greater. Meets criteria for disclosure at 0.1% or greater.
Risk Phrases: R48/20
Safety Phrase: S22, S38

Crystalline Silica (Cristobalite) :

TSCA 8(b): Inventory Status: Crystalline silica appears on the EPA TSCA inventory list, but is not regulated.
Section 304: Crystalline silica is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR 302.
Canada WHMIS: WHMIS Classification: Crystalline silica is classified as a D2A substance
NTP: Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as a carcinogen.
INTERNATIONAL:
IARC: “Inhaled crystalline silica from occupational sources” – Group 1 – is classified in IARC as a carcinogen.

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