Dear Customer:

In order to comply with the Hazard Communication Law which went into effect November 25, 1985, and the Globally Harmonized System (GHS) regulation update introduced by the Occupational Safety and Health Administration (OSHA) in 2012, attached is the safety data sheet pertaining to our product noted above.

Additional sheets are available upon request. Please feel free to contact us if we can be of further assistance.

Sincerely,

Mager Scientific, Inc.
Customer Service
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : RX 611 BLACK DUST
Synonyms : Phenolic Molding Compound

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

1.3. Details of the supplier of the safety data sheet

Sumitomo Bakelite North America, Inc.
24 Mill St.
Manchester, CT 06042 - USA
T 860-646-5500
www.sbhpp.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)
Carc. 2 H351
STOT RE 2 H373
Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US) :

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) :
H351 - Suspected of causing cancer
H373 - May cause damage to organs through prolonged or repeated exposure
H232 - May form combustible dust concentrations in air
Precautionary statements (GHS-US) :
P202 - Do not handle until all safety precautions have been read and understood
P264 - Wash hands, forearms and face thoroughly after handling
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P501 - Dispose of contents/container in accordance with all federal, state, and local health and environmental regulations.

2.3. Other hazards

Other hazards not contributing to the classification : Phenol, formaldehyde, and ammonia vapors may be released during molding processes. Overexposure to these vapors may cause irritation to eyes, nose, throat, and skin. Sensitized individuals may experience allergic skin reactions. Exposure to dust from machining operations may cause nose and throat irritation. High concentration of airborne dust may form an explosive mixture with air. Ensure that good housekeeping practices are followed, as well as applicable guidelines such as National Fire Protection Association (NFPA) 654, "Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable
### 3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>diatomaceous earth, uncalcined</td>
<td>(CAS No) 61790-53-2</td>
<td>10 - 20</td>
<td>STOT RE 2, H373</td>
</tr>
<tr>
<td>hexamethylenetetramine</td>
<td>(CAS No) 100-97-0</td>
<td>3 - 10</td>
<td>Flam. Sol. 2, H228, Skin Sens. 1, H317, Aquatic Acute 3, H402</td>
</tr>
<tr>
<td>carbon black</td>
<td>(CAS No) 1333-86-4</td>
<td>0.1 - 1</td>
<td>Carc. 2, H351</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

- **First-aid measures general**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Suspected of causing cancer.

- **First-aid measures after inhalation**: Call a POISON CENTER or doctor/physician if you feel unwell. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Allow victim to breathe fresh air. Allow the victim to rest.

- **First-aid measures after skin contact**: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

- **First-aid measures after eye contact**: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

- **First-aid measures after ingestion**: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Obtain emergency medical attention.

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

- Symptoms/injuries: Causes damage to organs.

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

No additional information available

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media


- Unsuitable extinguishing media: Do not use a heavy water stream.

##### 5.2. Special hazards arising from the substance or mixture

- Explosion hazard: high concentration of airborne dust may form an explosive mixture with air.

- Reactivity: Thermal decomposition generates: Corrosive vapors.

##### 5.3. Advice for firefighters

- Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

- Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

#### SECTION 6: Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

- **For non-emergency personnel**: Evacuate unnecessary personnel.

- **For emergency responders**: Equip cleanup crew with proper protection.

- Emergency procedures: Ventilate area.

##### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

##### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.
6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed: Avoid breathing fumes from molding or other processes involving heat. Avoid breathing dusts from cutting, machining or deflashing operations. Guard against dust accumulation of this material. High concentrations of airborne dust may form explosive mixture with air. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Proper grounding procedures to avoid static electricity should be followed. Comply with applicable regulations.

Storage conditions: Keep only in the original container. Keep container closed when not in use. Keep only in the original container in a cool, well ventilated place away from:

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight. Heat sources.

Storage area: Store in cool, dry place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>RX 611 BLACK DUST</th>
<th>ACGIH</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

hexamethylenetetramine (100-97-0)

<table>
<thead>
<tr>
<th>ACGIH</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA</td>
<td>Remark (OSHA)</td>
</tr>
</tbody>
</table>

(3) See Table Z-3.

diatomaceous earth, uncalcined (61790-53-2)

<table>
<thead>
<tr>
<th>ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACGIH</th>
<th>Remark (ACGIH)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bronchitis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.5 mg/m³</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Wear respiratory protection. Wear appropriate mask.

Other information: Do not eat, drink or smoke during use.
### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
<td>Solid</td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>Dust Black</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Black</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Characteristic</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Melting point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Freezing point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Relative evaporation rate (butyl acetate=1)</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Explosion limits</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>Mixtures of fine dust and air can create an explosion hazard.</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>1.7 - 1.9</td>
</tr>
<tr>
<td><strong>Relative vapor density at 20 °C</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Water: Solubility in water of component(s) of the mixture :</td>
</tr>
<tr>
<td></td>
<td>: : &gt; 80 g/100ml</td>
</tr>
<tr>
<td></td>
<td>: : 0.2 g/100ml</td>
</tr>
<tr>
<td></td>
<td>: : 0.15 g/100ml</td>
</tr>
<tr>
<td></td>
<td>: : : 0.040 g/100ml</td>
</tr>
<tr>
<td></td>
<td>: : : 0.0003 g/100ml</td>
</tr>
<tr>
<td></td>
<td>: : &gt; 0.00001 g/100ml</td>
</tr>
<tr>
<td></td>
<td>: : &lt; 0.01 g/100ml</td>
</tr>
<tr>
<td><strong>Log Pow</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Log Kow</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viscosity, kinematic</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viscosity, dynamic</strong></td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Thermal decomposition generates: Corrosive vapors.

#### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7). Not established.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid


#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products


### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity: Not classified
hexamethylenetetramine (100-97-0)

<table>
<thead>
<tr>
<th>Category</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 5000 mg/kg (Rat)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified

Carcinogenicity: Based on available data, the classification criteria are not met. Suspected of causing cancer.

**SECTION 12: Ecological information**

**12.1. Toxicity**

hexamethylenetetramine (100-97-0)

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>49800 mg/l (96 h; Pimephales promelas; Measured concentration)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>36000 mg/l (48 h; Daphnia magna)</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 1</td>
<td>3 g/l (336 h; Selenastrum capricornutum; Growth rate)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>49000 mg/l (96 h; Cyprinodon variegatus; Nominal concentration)</td>
</tr>
<tr>
<td>EC50 Daphnia 2</td>
<td>92,500 mg/l (96 h; Crustacea)</td>
</tr>
<tr>
<td>Threshold limit algae 1</td>
<td>1500 mg/l (336 h; Selenastrum capricornutum)</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

RX 611 BLACK DUST

Persistence and degradability: Not established.

hexamethylenetetramine (100-97-0)

Persistence and degradability: Hydrolysis in water.
Biochemical oxygen demand (BOD): 0.026 g O₂/g substance
ThOD: 1.37 g O₂/g substance (NH₃)
BOD (% of ThOD): 0.01897 % ThOD

**12.3. Bioaccumulative potential**

RX 611 BLACK DUST

Bioaccumulative potential: Not established.
hexamethylenetetramine (100-97-0)
Log Pow  -4.15 - -2.13
Bioaccumulative potential  Bioaccumulation: not applicable.

diatomaceous earth, uncalcined (61790-53-2)
Bioaccumulative potential  No bioaccumulation data available.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming  : No known ecological damage caused by this product.
Other information  : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations  : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with all federal, state, and local health and environmental regulations.
Ecology - waste materials  : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated for transport

Additional information
Other information  : No supplementary information available.

ADR
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations
hexamethylenetetramine (100-97-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
diatomaceous earth, uncalcined (61790-53-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
carbon black (1333-86-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations
CANADA
No additional information available

EU-Regulations
No additional information available

National regulations
carbon black (1333-86-4)
Listed on IARC (International Agency for Research on Cancer)
15.3. US State regulations

<table>
<thead>
<tr>
<th>carbon black (1333-86-4)</th>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>No significance risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Indication of changes : Revision - See : *
Other information : None.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Aquatic Acute 3</th>
<th>Hazardous to the aquatic environment - Acute Hazard Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carc. 2</td>
<td>Carcinogenicity Category 2</td>
</tr>
<tr>
<td>Flam. Sol. 2</td>
<td>Flammable solids Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Skin sensitization Category 1</td>
</tr>
<tr>
<td>STOT RE 2</td>
<td>Specific target organ toxicity (repeated exposure) Category 2</td>
</tr>
<tr>
<td>H228</td>
<td>Flammable solid</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>H402</td>
<td>Harmful to aquatic life</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012) SBNA

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