1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** EE 97 Series Black Fluoroelastomer Compounds  
**Chemical Family:** Elastomer Compounds

**Company Identification:**  
Eagle Elastomer, Inc.  
P.O. Box 939  
Cuyahoga Falls, Ohio  44223 USA  
(330) 923-7070 (For Product Information)  
[www.eagleelastomer.com](http://www.eagleelastomer.com)

Prepared By: John R. Allen Eagle Elastomer  
Date: August 30, 2016

2. COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS USED IN SOME OR ALL OF THE ABOVE PRODUCT NUMBERS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Percentage</th>
<th>CAS NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinylidene Fluoride Hexafluoropropene Polymer</td>
<td>30 – 90%</td>
<td>9011-17-0</td>
</tr>
<tr>
<td>Teflon Powder</td>
<td>0 – 5%</td>
<td>NE</td>
</tr>
<tr>
<td>Amorphous Fumed Silica</td>
<td>0 – 3%</td>
<td>7631-86-9</td>
</tr>
<tr>
<td>Barium Sulfate</td>
<td>0 – 3%</td>
<td>7727-43-7</td>
</tr>
<tr>
<td>Struktol HT290</td>
<td>0 – 3%</td>
<td>NE</td>
</tr>
<tr>
<td>Carnauba Wax</td>
<td>0 – 3%</td>
<td>8015-86-9</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>0.3 – 30%</td>
<td>1333-86-4</td>
</tr>
<tr>
<td>Calcium Hydroxide</td>
<td>1 – 6%</td>
<td>1305-62-0</td>
</tr>
<tr>
<td>Calcium Oxide</td>
<td>1 – 3%</td>
<td>1305-78-8</td>
</tr>
<tr>
<td>Magnesium Oxide</td>
<td>1309-48-4</td>
<td></td>
</tr>
<tr>
<td>Zinc Oxide</td>
<td>0 – 3%</td>
<td>1314-13-2</td>
</tr>
<tr>
<td>2,5-Dimethyl-2,5-di(t-butyleroxy)-hexane</td>
<td>Mixture</td>
<td></td>
</tr>
<tr>
<td>Trially Isocyanurate on silicon dioxide</td>
<td>0 – 3%</td>
<td>Mixture</td>
</tr>
<tr>
<td>Vinylidene Fluoride Hexafluoropropene Polymer – Tetrafluorethene Polymer</td>
<td>0 – 2%</td>
<td>25190-89-0</td>
</tr>
</tbody>
</table>

**COMPOSITION NOTES:**  
Material is not known to contain Toxic Chemicals under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.
3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING! CONTACT WITH UNCURED ELASTOMER MAY CAUSE IRRITATION TO EYES AND SKIN.

INHALATION OF FUMES FROM BURNING POLYMER MAY CAUSE TEMPORARY LUNG IRRITATION.

Routes of Exposure:

Eye Contact: Eye contact with uncured polymer may cause irritation with discomfort, tearing, or blurring of vision.

Skin Contact: Skin contact with uncured polymer may cause skin irritation with discomfort or rash. Significant skin permeation and systemic toxicity after contact appears unlikely. There are no reports of human sensitization.

Ingestion: Not a normal route of entry. Ingestion of this product may cause gastrointestinal irritation.

Inhalation: Inhalation of fumes from burning polymer may cause temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath. Higher exposures to fumes from burning material may cause pulmonary edema with cough, wheezing, abnormal lung sounds possibly progressing to severe shortness of breath and bluish discoloration of the skin. Symptoms may be delayed.

Note: Smokers should avoid contamination of tobacco products with polymer and should wash their hands before smoking.

Chronic: None known

Medical Conditions which May be Aggravated by Inhalation or Dermal Exposure: None known

Carcinogenic Potential: This product and its ingredients are not listed as a carcinogen by NTP, OSHA, ACGIH or IARC.

4. FIRST AID MEASURES

Eyes: Immediately flush eyes thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids. Seek immediate medical attention if irritation persists.

Skin: Wash with soap and water after handling. If molten material gets on the skin, cool rapidly with cold water. Do not attempt to remove material from skin. Obtain medical treatment for thermal burn.

Ingestion: Not expected to be a normal route of entry. No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult a physician if necessary.

Inhalation: If respiratory irritation or distress occurs remove victim to fresh air. No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary.

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

5. FIRE FIGHTING MEASURES

Flash Point - >204°C (>399°F) Open cup

Extinguishing Media – Water, Foam, Carbon Dioxide, Dry Chemical, Halon

Lower Explosive Limit – Not applicable

Special fire fighting Procedures – See Below

Upper Explosive Limit – Not applicable

Auto Ignition Temperature – Not Applicable

Hazardous Combustion Products – None known

Unusual Fire & Explosion Hazards – Hazardous gases/vapors produced in fire are hydrogen fluoride, carbonyl fluoride, carbon monoxide, low molecular weight fluorocarbons. Does not burn without external flame. Protect from hydrogen fluoride fumes which react with water to form hydrofluoric acid.

Special Fire Fighting Procedures:

Evacuate personnel downwind of fire to avoid inhalation of irritating and/or harmful fumes and smoke. Respiratory and eye protection are required for fire fighting personnel. Full protective equipment (Bunker Gear) and self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires.
6. ACCIDENTAL RELEASE MEASURES

Wear appropriate protective gear for the situation. See Personal Protection information in section 8.

Containment of Spill: Contain spill.

Spill:
Exercise appropriate precautions to minimize direct contact with skin or eyes. Sweep-up and place in appropriate container for disposal. Always dispose of waste according to current applicable laws and regulations and product characteristics at time of disposal.

Environmental and Regulatory Reporting: Not required

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes.

Storage: Store in an area that is cool, dry, and well ventilated. Keep containers tightly closed to prevent moisture absorption and contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

Viton Fluoroelastomer All : Particulates (Not Otherwise Regulated) 15 mg/m³, total dust, 5 mg/m³, respirable dust.

Barium Sulfate : 15 mg/m³, total dust, 8 hr. TWA, 5 mg/m³, respirable dust, 8 hr. TWA

Engineering Controls: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure techniques may be used to effectively minimize employee exposures.

Eye Protection: Wear safety glasses with side shields. When possibility exists for eye and face contact due to splashing or spraying of molten material wear a face shield.

Skin Protection: As appropriate to prevent contact.

Respiratory Protection: When temperatures exceed 200°C and ventilation is inadequate to maintain Concentrations below exposure limits, use a positive pressure air supplied respirator. Air purifying respirators May not provide adequate protection.

Ventilation: Maintain good ventilation to exhaust vapors and fumes liberated during processing to maintain Hydrogen fluoride concentrations below the PEL.

Work Practice Controls:
Personal hygiene is an important work practice exposure control measure and the following general measures Should be taken when working with or handling this material:
(1) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance – Sheet, strip, perform or granulate
Odor – No odor
Physical State – Solid
Specific Gravity (H2O=1) – 1.77 – 1.86
Solubility in Water – Insoluble

Vapor Pressure – NA
Density – NA
Melting Point – NA
pH – N.E.
EE 97 Series Black Fluoroelastomer Compounds

10. STABILITY AND REACTIVITY

**Stability:** Stable at normal temperatures and storage conditions.

**Conditions to avoid:** Processing temperatures above 200°C (392°F)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

**Incompatibility with other materials:** Incompatible with finely divided metals such as aluminum. Compounding with metal powders presents an explosion hazard.

**Hazardous Decomposition:** Hydrogen fluoride, carbonyl fluoride, fluorinated hydrocarbons, fluorinated olefins and perfluoroolefine.

11. TOXICOLOGICAL INFORMATION

**Toxicity Data:**
- Toxicological Information and Interpretation: All ingredients: No data available

**Acute Hazards:**

**Eye and Skin Contact:** This material may be irritating to the eyes and skin upon contact with uncured polymer.

**Inhalation:** Fumes from burning polymer may be irritating to respiratory system.

**Swallowing:** Non known

**Chronic Toxicity:** This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be “probable” or “suspected” human carcinogens.

12. ECOLOGICAL INFORMATION

**Aquatic Toxicity Test Date:** No data available.

13. DISPOSAL CONSIDERATIONS

**Waste Disposal:** Preferred options for disposal are recycling, incineration with energy recovery and landfill. Dispose of waste material according to local, state and federal regulations. NOTE: Incinerate only in incinerators capable of scrubbing out acidic combustion products.

14. TRANSPORTATION INFORMATION

**Hazardous Materials Description/Proper Shipping Name:** Not Regulated

**Hazard Class:** NA

**Identification Number:** NA

**Required Label Text:** NA

15. REGULATORY INFORMATION

**FEDERAL REGULATORY STATUS:** Status under OSHA Hazard Communication Standard, 29 CFR 1910.1200: This product is considered a “hazardous chemical” under this regulation, and does need to be included in the employer’s hazard communication program.
EE 97 Series Black Fluoroelastomer Compounds

Reportable Quantities Under the Clean Water Act, CERCLA, and EPCRA, 40 CFR 117, 302 and 355:
This product contains the following components that have Reporting requirements.
CERCLA, The Reportable Quantity (RQ): None

Hazard Category and Applicability of EPCRA Hazardous Substance Inventory Reporting, 40 CFR 370:
Not listed

Applicability of EPCRA Toxic Chemical Release Inventory (TRI) Reporting, 40 CFR 372:
Not subject to TRI reporting

Status Under the Toxic Substances Control Act, 40 CFR 710:
All chemical(s) comprising this product are either exempt or listed on the TSCA Inventory.

SARA 311/312 Hazard Classes:

- Fire Hazard: NO
- Reactive Hazard: NO
- Release of Pressure: NO
- Acute Health Hazard: YES
- Chronic Health Hazard: NO

State Regulations:

California:
This product does not contain any components that are regulated under California Proposition 65.

16. OTHER INFORMATION

NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0

Hazardous Material Information System (HMIS):

- Health: 1
- Flammability: 0
- Reactivity: 0
- Personal Protection: A

NFPA/HNIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

ADDITIONAL INFORMATION:

The supplier disclaims all expressed or implied warranties of fitness or merchantability for a specific use, with
Respect to the product, or the information provided herein, except for conformation to contracted specifications.
All information appearing herein is based upon data obtained from manufacturer and/or recognized technical
sources. While the information is believed to be accurate, we make no representations as to its accuracy or
sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data
under their own operating conditions to determine whether the product is suitable for their particular purposes and
they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to
the publication or use of, or reliance upon, information contained herein. This information relates only to the product
designated herein, and does not relate to its use in combination with any other material or process.

END OF MSDS