1. Product and Company Identification

**Product Name:** BUNA EP T 6470 P  
**Material Number:** 4884329  
**Chemical Family:** EP(D)M Rubbers  
**Chemical Name:** Bicyclo(2.2.1)hept-2-ene, 5-ethylidene-, polymer with ethene and 1-propene  
**Synonyms:** Ethylene Propylene Diene Rubber, EPDM Rubber  
**CAS-No.:** 25038-36-2  
**Formula:** \((C9H12.C3H6.C2H4)x\)

2. Hazards Identification

### Emergency Overview

**CAUTION!**  
**Color:** White to tan or light grey  
**Form:** Solid Pellets  
**Odor:** Slight, characteristic.  
May cause mechanical irritation (abrasion). Causes a slipping hazard if spilled. Irritating gases/fumes may be given off during burning or thermal decomposition. Contact with hot material will cause thermal burns.

**Potential Health Effects**

**Primary Routes of Entry:** Skin Contact, Eye Contact, Inhalation

**Medical Conditions Aggravated by Exposure:** None known.

**HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE**

**General Effects of Exposure**

**Acute Effects of Exposure**

**For Product: BUNA EP T 6470 P**

Not expected to cause any adverse acute health effects. Mechanical irritation (i.e., abrasion) may occur if material is introduced into the eye. Eyes may become red, feel scratchy and may tear. Gases and fumes
evolved during the thermal processing or decomposition of this material may irritate the eyes, skin or respiratory tract.

**Chronic Effects of Exposure**

**For Product: BUNA EP T 6470 P**

Repeated exposure to high amounts of talc can cause talcosis, a pulmonary fibrosis, which may lead to severe and permanent damage to the lung, possibly resulting in disability or death.

**Carcinogenicity:**

No Carcinogenic substances as defined by IARC, NTP and/or OSHA

### 3. Composition/Information on Ingredients

#### Hazardous Components

<table>
<thead>
<tr>
<th>Weight %</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5%</td>
<td>Talc (non-asbestos form)</td>
<td>14807-96-6</td>
</tr>
</tbody>
</table>

**OTHER INGREDIENTS**

The following potentially hazardous ingredient(s) are contained at levels below disclosure requirements and are provided for informational purposes only. The concentrations reported below in units of parts per million (ppm) or parts per billion (ppb) are maximum values.

<table>
<thead>
<tr>
<th>Weight %</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 ppm</td>
<td>5-Ethylidene-2-norbornene</td>
<td>16219-75-3</td>
</tr>
<tr>
<td>12 ppm</td>
<td>Cyclohexane</td>
<td>110-82-7</td>
</tr>
</tbody>
</table>

### 4. First Aid Measures

**Eye Contact**

In case of contact, flush eyes with plenty of lukewarm water. Get medical attention if irritation develops.

**Skin Contact**

In case of skin contact, wash affected areas with soap and water. Get medical attention if thermal burn occurs.

**Inhalation**

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

**Ingestion**

Get medical attention.

### 5. Fire-Fighting Measures

**Suitable Extinguishing Media:** All extinguishing media are suitable.

**Special Fire Fighting Procedures**

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

**Unusual Fire/Explosion Hazards**
Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

6. Accidental release measures

Spill and Leak Procedures
Remove mechanically by a method that minimizes the generation of airborne dust (vacuum cleaner, wet mopping, etc.) Collect and place in appropriately marked sealable containers for disposal.

7. Handling and Storage

Storage Temperature:
maximum: 35 °C (95 °F)

Storage Period
24 Months

Handling/Storage Precautions
Avoid contact with eyes. Avoid breathing dust. Avoid inhalation and skin or eye contact with processing fumes. Use local exhaust ventilation above processing equipment. Wash thoroughly after handling. Keep container closed when not in use.

Further Info on Storage Conditions
Store in a cool dry place. Store in original or similar containers. Light may result in degradation of product.

8. Exposure Controls / Personal Protection

Talc (non-asbestos form) (14807-96-6)
US. ACGIH Threshold Limit Values
Time Weighted Average (TWA): 2 mg/m3 (Respirable fraction.) The value is for particulate matter containing no asbestos and <1% crystalline silica.

US. ACGIH Threshold Limit Values
Hazard Designation: Group A4 Not classifiable as a human carcinogen.

5-Ethylidene-2-norbornene (16219-75-3)
US. ACGIH Threshold Limit Values
Ceiling Limit Value: 5 ppm

Cyclohexane (110-82-7)
US. ACGIH Threshold Limit Values
Time Weighted Average (TWA): 100 ppm
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
PEL: 300 ppm, 1,050 mg/m3

Industrial Hygiene/Ventilation Measures
Thermal processing operations should be ventilated to control gases and fumes given off during processing. Engineering controls should be sufficient to ensure airborne levels do not approach or exceed the exposure limit value for residuals.

Respiratory Protection
The following respirator is recommended if airborne concentrations exceed the appropriate standard/guideline. NIOSH approved, air-purifying particulate respirator with N-95 filters. When respirators are in use, an OSHA compliant respirator program is required (29 CFR 1910.134). Airborne concentrations must not exceed the respirator's Assigned Protection Factor multiplied by the appropriate standard/guideline.

**Hand Protection**
gloves

**Eye Protection**
safety glasses with side-shields.

**Additional Protective Measures**
Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product.

### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form:</strong></td>
<td>Solid</td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
<td>Pellets</td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>White to tan or light grey</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Slight, Characteristic</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Melting Point:</strong></td>
<td>Not Established</td>
</tr>
<tr>
<td><strong>Boiling Point/Range:</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Flash Point:</strong></td>
<td>&gt; 300 °C (&gt; 572 °F) (Cleveland Open Cup (ASTM D-92))</td>
</tr>
<tr>
<td><strong>Lower Explosion Limit:</strong></td>
<td>Not Established</td>
</tr>
<tr>
<td><strong>Upper Explosion Limit:</strong></td>
<td>Not Established</td>
</tr>
<tr>
<td><strong>Vapor Pressure:</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Specific Gravity:</strong></td>
<td>0.86</td>
</tr>
<tr>
<td><strong>Solubility in Water:</strong></td>
<td>Insoluble</td>
</tr>
<tr>
<td><strong>Solubility/Quantitative:</strong></td>
<td>Aromatic hydrocarbons soluble</td>
</tr>
<tr>
<td></td>
<td>Aliphatic hydrocarbons soluble</td>
</tr>
<tr>
<td><strong>Autoignition Temperature:</strong></td>
<td>Not Established</td>
</tr>
<tr>
<td><strong>Decomposition Temperature:</strong></td>
<td>&gt; 200 °C (&gt; 392 °F)</td>
</tr>
<tr>
<td><strong>VOC Content:</strong></td>
<td>Negligible</td>
</tr>
<tr>
<td><strong>Viscosity, Dynamic:</strong></td>
<td>not applicable</td>
</tr>
</tbody>
</table>

### 10. Stability and Reactivity

**Hazardous Reactions**
Hazardous polymerization does not occur.

**Stability**
Stable under normal conditions of use and storage.

**Materials to avoid**
None known.

**Conditions to avoid**
Avoid extreme heat. Do not expose to direct sunlight.

**Hazardous decomposition products**
By Fire and Thermal Decomposition: Carbon Monoxide; Carbon Dioxide; hydrocarbons, Other
11. Toxicological Information

Toxicity Data for Talc (non-asbestos form)
Skin Irritation
rabbit, No skin irritation

Eye Irritation
rabbit, No eye irritation

Mutagenicity
Genetic Toxicity in Vitro:
Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium)
Genetic Toxicity in Vivo:
Dominant Lethal Assay: Negative results were reported in various in vivo studies. (rat, )

Developmental Toxicity/Teratogenicity
rat, female, oral, gestation, daily, NOAEL (teratogenicity): 1,600 mg/kg,
No Teratogenic effects observed at doses tested.
rabbit, female, oral, gestation, daily, NOAEL (teratogenicity): 900 mg/kg,
No Teratogenic effects observed at doses tested.

12. Ecological Information

Ecological Data for Talc (non-asbestos form)
Biodegradation
Not readily biodegradable.

Biological Oxygen Demand (BOD)
0 mg/l

Chemical Oxygen Demand (COD)
0 mg/g

Bioaccumulation
Does not bioaccumulate.

Acute and Prolonged Toxicity to Fish
LC50: > 10,000 mg/l (Zebra fish (Brachydanio rerio), 24 hrs)

13. Disposal considerations

Waste Disposal Method
Waste disposal should be in accordance with existing federal, state and local environmental control laws.

Empty Container Precautions
Recondition or dispose of empty container in accordance with governmental regulations.
14. Transportation information

Land transport (DOT)
Non-Regulated

Sea transport (IMDG)
Non-Regulated

Air transport (ICAO/IATA)
Non-Regulated

15. Regulatory Information

United States Federal Regulations

OSHA Hazcom Standard Rating: Hazardous

US. Toxic Substances Control Act: Listed on the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302):
Components
None

SARA Section 311/312 Hazard Categories:
Chronic Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):
Components
None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III
Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:
Components
None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes
and Appendix VIII Hazardous Constituents (40 CFR 261):
If discarded in its purchased form, this product would not be a hazardous waste either by listing or by
characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time
of disposal, whether a material containing the product or derived from the product should be classified as a
hazardous waste. (40 CFR 261.20-24)

State Right-To-Know Information
The following chemicals are specifically listed by individual states; other product specific health and safety
data in other sections of the MSDS may also be applicable for state requirements. For details on your
regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

<table>
<thead>
<tr>
<th>Weight %</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;=95%</td>
<td>Ethylene Propylene Diene Rubber</td>
<td>25038-36-2</td>
</tr>
</tbody>
</table>
California Prop. 65:
To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

Foreign Chemical Inventory List(s):
Canada DSL Inventory List - All components of this product are listed

16. Other Information

NFPA 704M Rating

<table>
<thead>
<tr>
<th></th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

HMIS Rating

<table>
<thead>
<tr>
<th></th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe
* = Chronic Health Hazard

LANXESS Corporation's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS Corporation as a customer service.

Contact Person: Product Safety Department
Telephone: (800) LANXESS
MSDS Number: R300655
Version Date: 01/08/2005
Report Version: 1.1

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