1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

ADVANCED ELASTOMER SYSTEMS, L.P.
388 South Main Street
Akron, Ohio 44311

EMERGENCY TELEPHONE NUMBERS
(CHEMTREC)
In the U.S. call 1-800-424-9300
Outside the US call collect 1-703-527-3887

Product Identification:
8271-55  8271-65  8271-75  8271-55B100

2. COMPOSITION/INFORMATION ON INGREDIENTS

Santoprene™ 8000 thermoplastic rubber grades are proprietary products. Their composition is trade secret information of Advanced Elastomer Systems, L.P. These products are not identified by CAS number. All components of these products appear on the Inventory of Chemical Substances published by the U.S. Environmental Protection Agency or qualify for the TSCA polymer exemption under U.S. Federal Register Vol. 60, No. 60, 3/29/95.

<table>
<thead>
<tr>
<th>Components within Polymer Matrix:</th>
<th>CAS. NO.</th>
<th>OSHA PEL</th>
<th>ACGIH PEL</th>
<th>Weight Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermoplastic rubber Mixture</td>
<td>Mixture</td>
<td>None established</td>
<td>None established</td>
<td>100%</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>3.5mg/m³ TWA</td>
<td>3.5mg/m³ TWA</td>
<td>0 to 3%</td>
</tr>
</tbody>
</table>

Black grades contain carbon black, CAS No. 1333-86-4, within the polymer matrix. The International Agency For Research on Cancer (IARC) has determined that carbon black is possibly carcinogenic to humans (IARC Group 2B). IARC determined that there is inadequate evidence in humans but sufficient evidence in experimental animals for carcinogenicity of carbon black.

3. HAZARDS IDENTIFICATION

Emergency Overview:
HANDLE PELLETS IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES. THESE PRACTICES INCLUDE AVOIDING UNNECESSARY EXPOSURE AND REMOVAL OF THE MATERIAL FROM EYES, SKIN AND CLOTHING.

CAUTION! PROCESSING RELEASES VAPORS OR FUMES WHICH MAY CAUSE RESPIRATORY TRACT IRRITATION.

Avoid breathing processing fumes or vapors.
Process using adequate ventilation.

Potential Health Effects:
INHALATION: Inhalation of fumes or vapors during processing may cause respiratory tract irritation.
EYE CONTACT: Pellets do not cause significant eye irritation.
SKIN CONTACT: Pellets do not cause significant skin irritation.

4. FIRST AID MEASURES

INHALATION: If vapors are inhaled, remove to fresh air. If breathing is difficult, get medical attention.

5. FIRE FIGHTING MEASURES

Flash (piloted) Ignition Temperature: >650°F (343°C)  Method: estimated
Self-Ignition (non-piloted) Temperature: >700°F (371°C)  Method: estimated
Extinguishing Media: Water spray or any Class A extinguishing agent.

Special Firefighting Procedures: Firefighters and others exposed to products of combustion should wear self-contained breathing apparatus and full protective clothing. Carbon monoxide, oxides of nitrogen and hydrocarbons may be liberated as a toxic decomposition product when this thermoplastic rubber is ignited.

Unusual Fire and Explosion Hazards: None known.

Static Generation: Pneumatic transfer of plastic pellets can generate large static discharges which could cause an incendiary electrostatic spark. Excessive transfer also causes dust which can be ignited under some conditions. Take proper precautions when transferring this thermoplastic rubber, including grounding all equipment, providing an inert atmosphere and properly designing material handling equipment, to prevent electrostatic charge formation.

6. ACCIDENTAL RELEASE MEASURES
Spilled product may cause a slipping hazard.

IN CASE OF SPILL OR LEAK, vacuum or sweep up and place in clean, covered containers for recycle or disposal.

7. HANDLING AND STORAGE
Store in a cool, dry place. The processing of wet materials could cause steam generation in the equipment. Usual precautions in pellet handling should be observed to prevent contamination by dirt or other materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Eye Protection: This thermoplastic rubber does not cause significant eye irritation or eye toxicity requiring special protection. Use good industrial practice to avoid eye contact.

Skin Protection: Although this thermoplastic rubber does not present significant skin concern, minimize skin contamination by following good industrial hygiene practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

Respiratory Protection: Avoid breathing process vapors or dust. Use NIOSH approved respiratory protection equipment (full facepiece recommended) when airborne exposure is excessive. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. Respiratory protection programs must comply with 29 CFR 1910.134.

Ventilation: Provide natural or mechanical ventilation to minimize exposure. If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance: Various colors
Odor: Slightly rubberlike
Hardness: 55 Shore A to 75 Shore A

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.
10. STABILITY AND REACTIVITY

Stability: Thermally stable to 500°F (260°C). (approximation)

Materials to Avoid: This thermoplastic rubber may react with strong oxidizing chemicals, as well as acetal resins at temperatures of 425°F (218°C) and above, producing decomposition of the acetal resin, and formaldehyde as a decomposition product. Decomposition of halogenated polymers and reactive phenolic resins may also be accelerated when they are in contact with this thermoplastic rubber at processing temperatures. Thoroughly purge processing equipment with polyolefin polymers, including polypropylene, when using the same equipment to process this thermoplastic rubber and acetal resins, halogenated polymers and phenolic resins. Do not mix Santoprene™ 8000 series thermoplastic rubber with acetal resins, halogenated polymers or phenolic resins at elevated temperatures.

Hazardous Decomposition Products: Smoke, carbon monoxide, oxides of nitrogen and possibly hydrocarbons may evolve when processing temperatures exceed 500°F or when this thermoplastic rubber is ignited.

Hazardous Polymerization: Does not occur.

11. TOXICOLOGICAL INFORMATION

Effects of Exposure

Skin contact is expected to be the primary route of occupational exposure to Santoprene™ 8000 series thermoplastic rubber. Due to its chemical and physical properties, this thermoplastic rubber does not appear to possess any toxicological properties which would require special handling other than the good industrial hygiene and safety practices employed with any industrial material of this type.

However, under normal processing conditions, this product will release fumes and vapors. Components of these releases may vary with processing times and temperatures and therefore specific composition cannot be predicted based on current information. These process releases may produce respiratory tract irritation where such releases are allowed to build up due to inadequate ventilation in the general work area. These fumes and vapors, with repeated and prolonged exposure at high concentrations, could cause nausea, drowsiness and headache, especially if such exposures exceed current exposure limits (where established). Good industrial hygiene and safety practices should be used to avoid unnecessary exposures.

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

When discarded, this thermoplastic rubber is not a "hazardous waste" as that term is defined in 40 CFR 261, "Identification and Listing of Hazardous Waste.” Recycle or burn in an approved incinerator or dispose of in an approved chemical landfill in accordance with all applicable local, state and federal laws and regulations. Consult your attorney or appropriate regulatory officials for information on such disposal. Reprocess only uncontaminated material.

Spill or Leakage Procedures: Vacuum or sweep up and place in container for recycle or disposal as recommended above.

Disposal Procedures: Recycle or burn in an approved incinerator or dispose of in an approved chemical landfill in accordance with all applicable local, state and federal laws and regulations.

14. TRANSPORT INFORMATION

DOT Proper Shipping Name: Not Applicable
DOT Hazard Class/I.D. No.: Not Applicable
DOT Label: Not Applicable
U.S. Surface Freight Classification       Rail: Rubber, Synthetic Crude       Truck: Rubber, Crude
15. REGULATORY INFORMATION

Reportable Quantity (RQ) Under
DOT (49 CFR) and CERCLA Regulations: Not Applicable

SARA Hazard Notification
Hazard Categories under criteria of
SARA Title III rules (40 CFR Part 370): Not Applicable

Section 313 Hazardous Chemical(s): Not Applicable

Hazardous Chemical(s) under OSHA Hazard Communication Standard:
Black grades contain carbon black 2 to 3% weight range

HMIS Rating: Reactivity: 1 Health: 1 Flammability: 1

16. OTHER INFORMATION

MSDS number: 0514-0627
Date MSDS Initially Prepared: 06/27/05
Revision(s): 06/09/06 – Addition of 8271-55B100; reviewed and updated for accuracy

FOR ADDITIONAL NON-EMERGENCY INFORMATION, CONTACT:

Product Safety
(330) 849-5163

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