SECTION 1: Identification of the substance/mixture and of the company / undertaking

1.1. Product Identifier

- Substance Name: Polystyrene (high impact)
- EC No.: Not available
- CAS No.: 9003-55-8
- REACH Registration No.: Polymer exempt
- Standard Product Types: HIPS825, HIPS825E and HIPS825EX
- Synonyms: Styrene polymer, HIPS, Styrene-butadiene copolymer
- Chemical Formula: \((\text{C}_{12}\text{H}_{14})_x\)

1.2. Relevant Identified Uses of the Substance and Uses Advised Against

- Extrusion and injection molding

1.3. Details of the Supplier of the Safety Data Sheet

- Name: Aschem Petrokimya Sanayi A.Ş.
- Address: Adana Yumurtalık Serbest Bölgesi 01920 01355 Ceyhan, ADANA /TÜRKİYE
- Phone: +90 322 634 22 10
- E-mail (competent person): gorkemg@aschem.com.tr
- Web: www.aschem.com.tr

1.4. Emergency Phone Numbers: +90 322 634 22 10 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the Substance

- Substance is currently not listed in ANNEX VI of EU CLP Regulation No 1272/2008.

2.2. Label Elements

- Substance is currently not listed in ANNEX VI of EU CLP Regulation No 1272/2008.
- **Signal Word**: None
- **Pictograms**: None
- **Hazard Class & Statement**: None
- **Precautionary Statements**: None

2.3. Other Hazards

- Possibility of explosion exists under dusty conditions.
- Contact with hot material causes thermal skin burns.
SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substances / Ingredient</th>
<th>Identifier</th>
<th>%</th>
<th>Classification (EC No. 1272/2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene-butadiene copolymer</td>
<td>RRN: Not available EC: Not available CAS: 9003-55-8</td>
<td>≥ 95.0</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

**Skin Contact**
Wash contaminated skin with plenty of water. Remove contaminated clothes and shoes. If symptoms persist, obtain medical attention.

**Eye Contact**
Wash with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**Inhalation**
Remove to fresh air. Keep person warm and rest. Seek medical attention if breathing difficulties occur. If unconscious, place in recovery position, loosen tight clothing such as, collar, tie, belt, waistband etc. and get medical attention immediately.

**Ingestion:**
Wash out mouth with water. Removes dentures if any. Move exposed person to fresh air. Keep person warm and rest. If swallowed; Do not induce vomiting. Obtain medical attention immediately if ingested.

**Indication of any immediate medical attention and special treatment needed**
Unlikely to be required but if necessary treat symptomatically.

**Long term/delayed effects**
No specific information is available.

SECTION 5: Firefighting measures

**5.1. Distinguishing Media**

Suitable extinguishing media: Water spray, carbon dioxide, foam and dry powder.

Unsuitable extinguishing media: Water jet.

**5.2. Special Hazards Arising from the Substance**
May release carbon monoxide, carbon dioxide on combustion.

**5.3. Advice for Firefighters**

Firefighters should wear complete protective clothing including self-contained breathing apparatus. Keep personnel removed from and upwind of fire. Keep containers cool by spraying water if exposed to fire.
SECTION 6: Accidental release measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Spilling product may be slippery.
Fine dust clouds may form explosive mixtures with air.
Containers should be grounded. Produces flammable vapors on heating above melting point.
Take precautionary measures against static discharges.
Provide adequate ventilation.
Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Avoid dispersal of spilled material and run-off to contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution.

6.3. Methods for cleaning up

Small spillages: Move containers from spilled area. Vacuum or sweep up material and place in a designated, labelled waste container.
Dispose of via a licenced waste disposal contractor.
Large spillages: Move containers from spilled area. Avoid from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licenced waste disposal contractor.

6.4. Further information: See also Section 8 & 13.

SECTION 7: Handling and storage

7.1. Precautions for Safe Handling

Provide adequate ventilation, including appropriate local extraction.
Avoid formation of dust. Do not breath dust.
Put on appropriate personal protective equipment (see Section 8).
Do not eat, drink or smoke when using this product.
Wash hands before eating, drinking and smoking.
Avoid contact with eyes, skin and clothing.
Keep in the original container or an approved alternative made from a compatible material. Keep tightly closed when not in use.
Ground all equipment containing material.
Take precautionary measures against static discharges. Ensure adequate earthing.
Avoid release to environment. In case of disposal, consider local-national regulations.
7.2. **Conditions for Safe Storage, including any incompatibilities**

Store in an original container -protected from direct sunlight- in a dry, cool and well-ventilated area.

Keep away from incompatible materials.

Keep away from food and drink.

Keep container tightly closed and sealed until ready for use.

Opened containers should be carefully handled and kept upright to prevent leakage.

Do not store in an unlabeled containers.

Use appropriate containment to avoid environmental contamination.

Never stack pallets more than two high to prevent the risk of falling over.

7.3. **Specific End Use**

Extrusion and injection molding

**SECTION 8: Exposure controls/personal protection**

8.1. **Control Parameters**

Not specific data available.

8.2. **Exposure controls**

**Engineering controls:**
Local well-ventilation is recommended.

**Individual Protection Measures**

- **Eye/Face Protection**
  Safety eyewear with side-shields is recommended (EN 166).

- **Skin Protection**
  Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

  Wear suitable gloves (EN 374). Breakthrough time of the glove material; refer to the information provided by the gloves’ producer.

  Wear suitable protective clothing.

  Use an antistatic safety shoes/boots.

  When handling hot material, wear heat resistant protective gloves, clothing and face shield which are able to withstand the temperature of the molten product.

- **Respiratory protection**
  If there is dust formation/accumulation during transport and/or process, usage of approved dust mask is recommended.
### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Hygiene measures

- Do not eat, drink or smoke while using.
- Wash hands before breaks and at the end of workday.
- Solvents should never be used as hand cleaner.
- Work area, equipment and clothing should be cleaned regularly.
- Ensure that eyewash stations and safety showers are close to the workstation location.

### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Solid</td>
</tr>
<tr>
<td><strong>Form/Color</strong></td>
<td>Granular solid/Colorless</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>180-260 °C</td>
</tr>
<tr>
<td><strong>Flash Point (closed cup)</strong></td>
<td>&gt; 260 °C</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>&gt; 425 °C</td>
</tr>
<tr>
<td><strong>Relative Density</strong></td>
<td>1.04 – 1.65 g/cm³ (at 20 °C)</td>
</tr>
<tr>
<td><strong>Upper explosive limit</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Lower explosive limit</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Solubility in water</strong></td>
<td>Insoluble</td>
</tr>
<tr>
<td><strong>Vapour density (air: 1)</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Dispersion coefficient (n-octanol/water)</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>Containers should be grounded. Yields flammable vapors on heating above melting point.</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and Reactivity

10.1. Reactivity

Stable under normal usage and storage conditions.

10.2. Chemical Stability

Stable under normal usage and storage conditions.

10.3. Possibility of Hazardous Reactions

No specific data.
10.4. Conditions to avoid
No specific data

10.5. Incompatible Materials
No specific data

10.6. Hazardous decomposition products
May release carbon monoxide, carbon dioxide on combustion.

SECTION 11: Toxicological information

Potential acute health effects: No known significant effects or critical hazards.
Potential chronic health effects: There is no published data on effects of carcinogenicity, mutagenicity and reproductivity.

SECTION 12: Ecological information

12.1. Toxicity: No data
12.2. Persistence and Degradability: Polymer is considered to be non-biodegradable.
12.3. Bioaccumulative potential: No data
12.4. Mobility in soil: No data
12.5. PBT and vPvB Assessments: No data
12.6. Other Adverse Effects: None

SECTION 13: Disposal

Should be disposed according to local or national regulations.

SECTION 14: Transport Information

Not classified as dangerous good compared with UN, EC, IATA or any other derived organization regulations.
14.1. Roadway and Railway Transport (ADR/RID): not regulated
14.2. Seaway Transport (IMO/IMDG): not regulated
14.3. Airway Transport (ICAO/IATA): not regulated
14.4. Special Precautions: -

SECTION 15: Regulatory information

- Substance non classified according to 1272/2008/EC
- Substance non classified according to Directive 67/548/EEC
SAFETY DATA SHEET


<table>
<thead>
<tr>
<th>Product Name</th>
<th>ASCHEM HIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of issue</td>
<td>04.11.2015</td>
</tr>
<tr>
<td>Date of revision</td>
<td>01.01.2020</td>
</tr>
<tr>
<td>Form Number</td>
<td>UR.PS-BF-GBF02-EN</td>
</tr>
<tr>
<td>Revision No.</td>
<td>4</td>
</tr>
<tr>
<td>Page No.</td>
<td>7 / 7</td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Used Abbreviations

- **LTEL**: Long Term Exposure Limit
- **STEL**: Short Term Exposure Limit
- **PBT**: Persistent, Bioaccumulative and Toxic
- **vPvB**: very Persistent very Bioaccumulative

**Revision 1**: -This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010.

**Revision 2**: -E-mail of competent person had been changed.

**Revision 3**: -Form number had been changed.

**Revision 4**: -HIPS825EX Grade had been added to Section 1, Article 1.1.

Disclaimer

Refer to the appropriate ASCHEM’s bulletins for specific processing guidance and good manufacturing practices (purging, processing parameters, shutdown, etc.).

The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist.

Aschem makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.

Annex to the extended Safety Data Sheet (eSDS)

No information available.

**Prepared by**: Görkem GEZEK

**Approved by**: Dr. Ahmet R. ÖZKAN