

HIPS®**dioki****SAFETY DATA SHEET**

(According to Regulation (EC) 1907/2006 (REACH) and Regulation (EU) 2020/878)

www.dioki.com.tr**1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY****1.1. Product Identifier**

Product Name : Polystyrene (high impact)
Standard Product Types : HIPS 703, HIPS 803, HIPS 810, HIPS 810G
Synonyms : Styrene polymer, HIPS, Styrene-butadiene copolymer
Chemical Formula : $(C_{12}H_{14})_x$
Cas No : 9003-55-8

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

Extrusion, thermoforming and injection molding.

1.3. Details of The Supplier of the Safety Data Sheet

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1.4. Emergency Phone Numbers

+90 322 634 20 15-17 (24 hours)

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.

3. COMPOSITION / INFORMATION ON INGREDIENTS**3.1. Substances**

Component	%	CAS No	EINECS No	Hazard
Styrene-butadiene copolymer	≥ 95.0	9003-55-8	-	-

Additional information: Full text of H- and EUH-statements: see section 16.
Occupational exposure limit values are listed in Section 8, if available.

3.2. Mixtures

Not applicable

4. FIRST AID MEASURES

4.1. Description of 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.

4.2. Most Important Symptoms and Effects, both Acute and Delayed

No specific information is available.

Long term/delayed effects

No specific information is available.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Unlikely to be required but if necessary, treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1. Extinguishing 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, styrene, aliphatic hydrocarbons and traces of hydrogen bromide 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.

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 licensed 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 licensed waste disposal contractor.

6.4. Further information

See also Section 8 & 13.

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 (see Section 10).
- 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 container.
- 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, thermoforming and injection molding.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control Parameters

Not specific data available.

8.2. Exposure controls

8.2.1. Engineering controls

Local well-ventilation is recommended.

8.2.2. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Appearance	: Solid
Form/Color	: Granular solid/Colorless
Odour	: No
pH	: Not applicable
Boiling Point	: No data available
Melting Point	: 180-260 °C
Flash Point (closed cup)	: > 260 °C
Auto-ignition temperature	:> 425 °C
Relative Density	: 1.04– 1.65 g/cm ³ (at 20 °C)
Upper explosive limit	: No data available
Lower explosive limit	: No data available
Solubility in water	: Insoluble
Vapour density (air: 1)	: No data available
Dispersion coefficient (n-octanol/water)	: No data available
Explosive properties	: Containers should be grounded. Yields flammable vapours on heating above melting point.

9.2. Other Information

N/A

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.

11. TOXICOLOGICAL INFORMATION**11.1. Information on hazard classes as defined in regulation (EC) No 1272/2008**

Acute Toxicity	: Based on available data, the classification criteria are not met.
Skin corrosion / irritation	: Based on available data, the classification criteria are not met.
Serious eye damage / irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitization	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific Target Organ Toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific Target Organ Toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration damage	: Based on available data, the classification criteria are not met.

11.2. Information on Other Hazards

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.

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

13. DISPOSAL CONSIDERATIONS**13.1. Waste Treatment Methods**

Should be disposed according to local or national regulations.

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

N/A

15. REGULATORY INFORMATION

The product has been evaluated according to the regulations below, and if it is subject to any of them, the relevant information is stated in this Safety Data Sheet.

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

- CLP (EC) No 1272/2008 : Classification system
- (EU) 2020/878 (Revised Requirements for EU Safety Data Sheets)
- REACH (EC) No 1907/2006
 - REACH Annex XIV : None
 - REACH Annex XVII : None
- RoHS 2002/95/EC : None
- ODS (ozone-depleting substances) 1005/2009/EC : None
- Waste Framework Directive 2008/98/EC : Waste Treatment System

15.2. Chemical safety assessment

Chemical safety assessment has been carried out for those components of the mixture for which it was required.

16. OTHER INFORMATION**16.1. Revised sections**

Revision 1: Revised and edited according to (EU) 2020/878 directive.

16.2. List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements given under Sections 2 to 15 and (if applicable) full text of any statements which are not written out in full under the aforementioned Sections

Used Abbreviations

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

Disclaimer

Refer to the appropriate Dioki Petrokimya Sanayi A.Ş. 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.

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