

# MATERIAL SAFETY DATA SHEET (MSDS)

## SBR Binder for Li-Ion Anode

### I. Company and Product Identification

Company: MTI Corporation  
860 S. 19th Street, Richmond  
CA 94804  
Telephone: 510-525-3070  
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Product: Styrene-Butadiene Rubber (SBR) binder for Li-ion Battery Anode

Chemical Name: Styrene-Butadiene Rubber (SBR)

### II. Ingredients / Identity Information

Major components: Styrene-Butadiene Rubber (SBR)

### III. Physical Properties

- Appearance: Milky white liquid with light blue gloss.
- Solidity: 50 +/- 2%
- PH: 6-7
- Viscosity (NDJ-5S, 25oC): 100~350 mPa. S
- Vitrification temperature: -18 °C
- Storage Temperature: 0~38 °C
- Odor: Slight typical rubber product odor
- Specific Gravity: 1.3-1.6

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Boiling Point: N/A Melting  
Point: N/A  
Decomposition Temperature: >250 °C  
Vapor Pressure: N/A  
Percent Volatile: N/A  
Solubility in Water: Insoluble

#### IV. Fire and Explosion Hazard Data

Flash Point: > 300 °C  
Lower Explosion Limit: N/A  
Upper Explosion Limit: N/A  
Fire Hazard: Flammable / Combustible under high heat and flame.  
Can generate toxic and combustible fumes, - carbon monoxide, chlorinated and hydrocarbon compounds, and soot.  
Fire Fighting Procedures: Use full protective equipment and SCBA, filter masks, etc.  
Extinguishing Media: High expansion foam, water fog and spray.

#### V. Health Hazards

Contact: May cause skin irritation. For prolonged handling, use protective gloves and clothing. Wash hands with mild soap after handling.  
Avoid contact with eyes. If the eyes are irritated flush with water for ten minutes. Obtain medical attention.  
Avoid ingestion. If ingested seek medical attention.

Inhalation: Excessive inhalation can cause headache, nausea, irritation. Handle the product in minimum quantity and work in well-ventilated area.

#### VI. Reactivity and Stability

Stability: Product is non-reactive with aliphatic hydrocarbons and non-polar chemicals.  
Do not use in contact with strong acids and alkaline solutions.

Reactivity: Stable under normal working and storage condition. Normally store below 35 °C in cool, dry location.

#### VII. Waste Disposal

Disposal must be in accordance with Federal, State and Local Regulations.  
Bury waste in approved landfill site.  
Do not incinerate.

### VIII. Protective Equipment

- Ventilation: Local and general ventilation is necessary to keep air concentration below level of concern.
- Gloves: Leather, Rubber, Rubberized Textile
- Eye Protection: Chemical Workers' Goggles
- Respiratory Protection: NIOSH/MSHA approved respirator appropriate for exposure of concern.
- Other Equipment: Appropriate safety footwear, and appropriate clothing to minimize skin contact.

### IX. Storage and Transportation

Package product in paper, plastic film, or box in order to minimize surface exposure. Store in cool, dry, ventilated area.

### X. Information

With appropriate commercial practices, the cloth insert SBR rubber product is safe to handle and in storage. For further information on the material or this MSDS contact the Technical Director at MTI Corporation.