Material Safety Data Sheet

SECTION 1 MATERIAL/COMPANY IDENTIFICATION

1. PRODUCT NAME and BRAND
Baling Brand SBC Series Products include SBS, SIS and SEBS.

1.1 SBS: Baling Brand SBS has nineteen brands: SBS1301 (YH-791), SBS1301-1 (YH-791H), SBS1401 (YH-792), SBS1201 (YH-796), SBS1302 (YH-761), SBS1301-3 (YH-762), SBS1401-1 (YH-763), SBS3301 (YH-768), SBS1301-2 (YH-788), SBS4302 (YH-801 Mn 230,000), SBS4303 (YH-801Mn 300,000), SBS4402 (YH-802), SBS4402-1 (YH-803), SBS4452 (YH-805), SBS4412 (YH-815), SBS4452-2 (YH-825), SBS4452-1 (YH-875), SBS2303 (YH-898), SBS4303-2 (No.2 road modification), SBS1301 (YH-791), SBS1301-1 (YH-791H), SBS1401 (YH-792), SBS1201 (YH-796), SBS1302 (YH-761), SBS1301-3 (YH-762), SBS1401-1 (YH-768), SBS1301-2 (YH-788) are linear type, the others are radial type.

1.2 SIS: Baling Brand SIS has seven brands: SIS1105, SIS1106, SIS1200, SIS1204, SIS1209, SIS1225, SIS4104, SIS4104 is radial type, the others are linear type.


2. CHEMICAL NAME
2.1 SBS: Styrene-Butadiene-Styrene block copolymer.
2.2 SIS: Styrene-Isoprene-Styrene block copolymer.
2.3 SEBS: Hydrogenated Styrene-Butadiene-Styrene.

3. CORPORATION ADDRESS
Baling Petrochemical Corporation LTD.Yunxi District Yueyang City Hunan Province China

SECTION 2 COMPOSITION

COMPONENTS
1. SBS: Styrene-Butadiene Block Copolymer, antioxidant/active agent
2. SIS: Styrene-Isoprene Block Copolymer, antioxidant/active agent
3. SEBS: Styrene-Ethylene/Butylene-Styrene Block Copolymer, antioxidant/active agent

SECTION 3 HAZARDS IDENTIFICATION

1. Human Health Hazards:
Molten product adheres to the skin and causes burns.

2. Safety Hazards:
Electrostatic charges may be generated during handling. Self-ignition of bulk product could occur above certain temperatures. Specifically for powder and accumulated polymer dust, dust explosion could occur.

3. Environmental Hazards:
No specific Hazards.

4. Other Hazards:
Not classified as dangerous for supply or conveyance.
5. **Special Notes:**
These materials are rubber compounds, which are essentially non-toxic. Material is not irritating. If polymers dusts are generated, they could scratch the eyes and cause minor irritation to the respiratory tract.

**SECTION 4 FIRST AID MEASURES**

1. **Symptoms and Effects:**
Not expected to give risk to an acute hazard under normal conditions of use.

2. **Inhalation:**
Remove to fresh air. If rapid recovery does not occur, obtain medical attention.

3. **Skin:**
If contact with hot material, cool the burn area by flushing with large amounts of water. **DO NOT** attempt to remove anything from the burn area or apply burn creams or ointments. Cover the burn area loosely with a sterile dressing, if available and seek medical attention.

4. **Eye:**
Flush eye with water. Seek medical attention if necessary.

5. **Ingestion:**
No specific measures.

**SECTION 5 FIRE FIGHTING MEASURES**

1. **Specific Hazard:**
Not classified as flammable but will burn. Hazardous combustion products may include carbon monoxide, carbon dioxide.

2. **Extinguishing Media:**
Foam, water spray or fog, dry chemical powder, carbon dioxide, sand or earth. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

3. **Protective Equipment:**
Wear protective clothing and self-contained breathing apparatus.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

1. **Personal Precautions:**
Avoid raising a dust cloud.

2. **Environmental Precautions:**
No special Measures.

3. **Clean-up methods – small spillage:**
Shovel up for subsequent safe disposal as required by local, international or country specific regulations.

4. **Clean-up methods – large spillage:**
Transfer to a labeled, sealable container for product recovery or safe disposal as required by local, international or country specific regulations.

5. **Protective measures:**
Wear appropriate personal protective equipment when responding to spills.
6. Spill management:
Shovel and sweep up or use industrial vacuum cleaner. Proper disposal should be evaluated based on regulatory status of this material, potential contamination from subsequent use and spillage, and regulations governing disposal in the local area. Prevent entry into waterways, sewer or confined areas.

SECTION 7 HANDLING AND STORAGE

1. Storage:
Stack in a row and keep in a space. Keep container dry. Keep in a dry, clean, and well-ventilated place. Keep away from direct sunlight and other sources of heat or ignition. Avoid accumulation of product in air. Avoid storage exceeding guarantee period.

2. Handling:
Avoid generation or accumulation of dusts. Take precautionary measures against static discharges, earth/ground all equipment. Avoid contact with heated or molten product. Do not breathe dust, fumes or vapors from heated product. Use local exhaust ventilation in processing area. Take precautionary measures against direct sunlight and rain drenching during transport. Keep transportation vehicle clean. Avoid packaging destruction and keep away from impurity.

SECTION 8 EXPOSURE CONTROLS/PERSOAL PROTECTION

1. Occupational exposure:
None established. In the absence of occupational exposure standards for this product, it is recommended that the following be adopted.

1.1 DUST, RESPIRABLE DUST
Total inhalable dust: TWA=10mg/m³ (8h)
Respirable dust: TWA=4mg/m³ (8h)

1.2 Rubber fume
Rubber manufacturing and processing giving rise to rubber dust and rubber fume.
Rubber fume: MEL/TWA=0.6mg/m³ (8h)
Rubber process dust: MEL/TWA (8h)=6mg/m³

MEL=maximum exposure limit

2. Engineering control measures:
Use local exhaust ventilation.

3. Personal protection:
Use practicable methods (wear dust-tight mono goggles, cloth gloves and work clothes) to protect eyes and minimum skin contaminate. If contact with product, wash hands and flush contaminated skin. Do not breathe vapors. For high airborne dust concentrations use respiration protective apparatus approved to be used.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

1. SBS
Physical state: solid granular
Color: white
Odor: essentially odorless
Density: typical between 910-930 kg/m³ at 20 Deg.C
Specific gravity: <1
Bulk density (for solids): typical 260-310 kg/m³ at 20 Deg. C
Solubility (in water): insoluble

2. SIS
Physical state: solid powder
Color: white
Odor: essentially odorless
Density: typical between 880-930 kg/m³ at 20 Deg.C
Specific gravity: <1
Bulk density (for solids): typical 320-380 kg/m³ at 20 Deg. C
Solubility (in water): insoluble

3. SEBS
Physical state: solid powder
Color: white
Odor: essentially odorless
Density: typical between 900-910 kg/m³ at 20 Deg.C
Specific gravity: <1
Bulk density (for solids): typical 160-180 kg/m³ at 20 Deg. C
Solubility (in water): insoluble

SECTION 10 REACTIVITY AND STABILITY

Stability:
SBS is stable under ambient conditions. Softening will start at above 90 degree, and cross linking and plasticizing will occur at above 200 degree, degradation and burning will start at 300 degree and will release carbon monoxide, carbon dioxide. SIS has excellent thermal-oxidative stability; degradation will start at more than 216 degree, The properties of heat-resistance and weather-resistance of SEBS has been improved for the hydrogenation of butadiene double bond, its degradation temperature is above 255 degree.

Conditions to avoid:
Avoid contacting with strong oxidizing agents and exposing to elevated temperatures for extended periods in air.

Hazardous decomposition products:
Hazardous vapor from heated products are not expected to generate under normal processing temperatures and conditions. If the product is over heated, is smoldering or catches fire, a variety of thermal decomposition products may be present. These range from simply hydrocarbons (such as methane and propane) to toxic vapors (such as carbon monoxide and carbon dioxide, acrolein, aldehydes and ketones).

SECTION 11 TOXICOLOGICAL INFORMATION

Basis for assessment:
Toxicological data has not been determined specifically for this product. Information given is
based on knowledge of the toxicology of similar products.

**Acute toxicity oral:**
Expected to be of low toxicity, DL50 > 2000mg/kg

**Acute toxicity dermal:**
Expected to be of low toxicity, DL50 > 2000mg/kg

**Acute toxicity Inhalation:**
Data not available

**Skin irritation:**
Not expected to be irritating

**Eye irritation:**
Not expected to be irritating

**Skin sensitization:**
Not expected to be a skin sensitizer.

**Repeated Dose Toxicity:**
Repeated exposure does not cause significant toxic effects.

**Mutagenicity:**
Not considered to be a mutagenic hazard

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**SECTION 12 ECOLOGICAL INFORMATION**

**Basis for assessment:**
Ecotoxicological data have not been determined specifically for this product. The information given below is based on knowledge of the components and the ecotoxicology of similar products.

**Mobility:**
Floats on water and remains on surface of soil.

**Persistence /Degradability:**
Expected to be not inherently biodegradable. Persists under anaerobic conditions.

**Bioaccumulation:**
Not expected to be bioaccumulate.

**Acute toxicity –fish:**
Expected to be practically non toxic, LC/EC/IC50 > 1000 mg/l

**Acute toxicity –invertebrates:**
Expected to be practically non toxic, LC/EC/IC50 > 1000 mg/l

**Acute toxicity –algae:**
Expected to be practically non toxic, LC/EC/IC50 > 1000 mg/l

**Acute toxicity –bacteria:**
Expected to be practically non toxic, LC/EC/IC50 > 1000 mg/l

**Sewage treatment:**
Expected to be practically non toxic, LC/EC/IC50 > 1000 mg/l

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**SECTION 13 DISPOSAL CONSIDERATION**

**Waste Disposal:**
Recover or recycle if possible, otherwise incineration, otherwise Licensed landfill as required by local specific regulations.
Product Disposal:
Same as for waste disposal.

Container Disposal:
Remove all packing for recovery or waste disposal.

Others:
If this material becomes a waste and has not been chemically altered, it is not considered to a
hazardous waste as defined.

SECTION 14 TRANSPORT INFORMATION

International Air Transportation Association Classification:
This material is not classified as hazardous under ITAT regulations.

International Maritime Organization –IMDG:
This material is not classified as hazardous under IMDG regulations.

UN, IMO Code:
This material is not dangerous for conveyance under these codes.

SECTION 15 OTHER INFORMATION

Uses and Restrictions:
Baling Brand Products are high performance thermoplastic elastomers engineered for high
performance and wide uses. Each customer or user is solely responsible for determining the
suitability of the materials they selected for the intended purpose.

Disclaimer:
This information is based on our current knowledge and is intended to describe the product for the
purposes of Health, Safety and Environmental requirements only. It should not therefore be
construed as guaranteeing any specific property of the product. Advice in this document relates
only to the product as originally supplied. Where other ingredients are added in the processing of
this product. Advice should be sought on their safe handling and use.