

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

**1.1. Product identifier**

Trade name: TAIPOL<sup>®</sup> SBS-3201; SBS-3206; SBS-4202; SBS-4230; SBS-4265

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**1.2.1. Relevant identified uses**

Use as shoe soles, adhesives, hot melts, plastic modifications, asphalt modifications.

**1.2.2. Uses advised against**

No data available.

**1.3. Details of the supplier of the safety data sheet**

Registered company name: TSRC Corporation  
Address: No.2, Singgong Rd., Dashe Dist., Kaohsiung City 815, Taiwan R.O.C.  
Telephone: +886-7-3513811  
Fax: +886-7-3520622  
E-mail: tpe.msds@tsrc-global.com

**1.4. Emergency telephone number**

Country	Official advisory body	Address	Emergency number
Taiwan	TSRC Corporation	No.2, Singgong Rd., Dashe Dist., Kaohsiung City 815, Taiwan R.O.C.	+886-7-3513811

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification according to GHS 4<sup>th</sup> version**

Not classified.

**Adverse physicochemical, human health and environmental effects**

No reliable data available.

**2.2. Label elements**

**Labelling according to GHS 4<sup>th</sup> version**

Not applicable.

**2.3. Other hazards**

No reliable data available.

**SECTION 3: Composition/information on ingredients**

Name	CAS No.	% wt/wt	Classification according to GHS
Styrene-Butadiene Copolymer	9003-55-8	> 98.0	Not classified
Antioxidant/Anticaking Agent	Proprietary	< 2.0	Not classified

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**Inhalation:** Move victim to fresh air. If not breathing, give artificial respiration. Get medical attention.

**Skin contact:** Immediately wash with plenty of soap and water. Get medical attention if irritation occurs.

**Eye contact:** Immediately flush eyes with running water for at least 20 minutes holding eyelids open. Get medical attention.

**Ingestion:** Do not induce vomiting. Give 1-2 glasses of water to a conscious victim. Never give anything by mouth to an unconscious victim. Get medical attention.

**Advice for the doctor:** Symptomatic treatment.

**4.2. Most important symptoms and effects, both acute and delayed**

No data available.

**4.3. Indication of any immediate medical attention and special treatment needed**

No reliable data available.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

Foam.  
Dry chemical powder.

BCF (bromochlorodifluoromethane) (where regulations permit).  
Carbon dioxide.  
Water spray or fog - Large fires only

## 5.2. Special hazards arising from the substance or mixture

Fire/explosion hazard: Emits toxic fumes under fire conditions.  
Main combustion gas: carbon monoxide, carbon dioxide gases.

## 5.3. Advice for firefighters

Alert Fire Brigade and tell them location and nature of hazard.  
Wear breathing apparatus plus protective gloves.  
Prevent, by any means available, spillage from entering drains or water courses.  
Use water delivered as a fine spray to control fire and cool adjacent area.  
DO NOT approach containers suspected to be hot.  
Cool fire exposed containers with water spray from a protected location.  
If safe to do so, remove containers from path of fire.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Wear suitable protective equipment.

#### 6.1.2. For emergency responders

Remove ignition sources and provision of sufficient ventilation, evacuate the danger area and consult experts.

### 6.2. Environmental precautions

Take precautions to prevent entry into waterways, sewers, or surface drainage systems. Dispose according to local or international regulations.

### 6.3. Methods and material for containment and cleaning up

Use appropriate tools to put the spilled solid in suitable container for recovery or disposal, avoid raising dust.

### 6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the MSDS

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid ingestion, inhalation, skin and eye contact. Minimize dust generation and accumulation; Static charge can be a potential fire hazard when used in the presence of volatile or flammable vapors or in high airborne dust concentrations. Handle in accordance with good industrial hygiene practice and any legal requirements.

### 7.2. Conditions for safe storage, including any incompatibilities

- Store this material in a cool, dry and well-ventilated area out of direct sunlight.
- It shall not be stored near to flammable materials and high temperature area for prolonged period.
- The preferred storage temperature is under 35°C. Avoid storage of bulk product at temperatures above ambient to minimize risk of exothermic degradation, self-heating and possible spontaneous combustion.
- In case of the product stored over one year or stored under abnormal condition, advise us before using.
- Storage incompatibility: Avoid reaction with strong oxidizing agents, strong alkali and strong acid.

### 7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience). Airborne concentrations must be maintained as low as is practically possible and occupational exposure must be kept to a minimum.

### 8.2. Exposure controls

Appropriate engineering controls Use: process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.  
General Personal Protection: Goggles, gloves, protective clothing.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	Solid
Colour:	White
Odour:	Odourless
Odour threshold:	No data available
pH:	Not applicable

Melting point:	No data available
Solidification point:	No data available
Boiling point:	Not applicable
Flash point:	> 288°C
Relat. evapor. rate comp. to butylacetate:	No data available
Flammability (solid, gas):	No data available
Explosive limits:	No data available
Vapour pressure:	No data available
Relative vapour density at 20 °C:	No data available
Relative density:	Not applicable
Solubility:	Insoluble
Log Pow:	No data available
Self ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	No data available
Oxidising properties:	No data available

## 9.2. Other information

No reliable data available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

See section 7.2

### 10.2. Chemical stability

Stable under normal condition.

### 10.3. Possibility of hazardous reactions

See section 7.2

### 10.4. Conditions to avoid

Strong oxidizing agents, strong alkali and strong acid; Ignition source.

### 10.5. Incompatible materials

See section 7.2

### 10.6. Hazardous decomposition products

Thermal decomposition products: carbon monoxide, carbon dioxide gases and oxide of phosphorus.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity:	Antioxidant mixture: Acute oral toxicity: LD <sub>50</sub> (rat) > 5000 mg/kg Acute inhalation toxicity: LC <sub>50</sub> (rat) > 1.81mg/L Acute dermal toxicity: LD <sub>50</sub> (rat) > 2000 mg/kg
Skin corrosion/irritation:	Antioxidant mixture: Skin irritation: not irritating.
Serious eye damage/irritation:	Antioxidant mixture: Eye irritation: not irritating.
Respiratory or skin sensitisation:	Antioxidant mixture: Not sensitising.
Germ cell mutagenicity:	Antioxidant mixture: Negative.
Carcinogenicity:	Antioxidant mixture: NOAEL: ≥ 218 mg/kg bw/day (males) and ≥ 275 mg/kg bw/day (females).
Reproductive toxicity:	Antioxidant mixture: NOEL(parental generation) > 1500 ppm; NOEL (F1, F2 generations) < 500 ppm.
Specific target organ toxicity (single exposure):	No data available
Specific target organ toxicity (repeated exposure):	No data available
Aspiration hazard:	No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

Antioxidant mixture:  
Fish (*Oncorhynchus mykiss*): LC<sub>50</sub>(96h): > 100 mg/L  
Invertebrates (*Daphnia magna*): EC<sub>50</sub>(24h): > 100 mg/L

#### 12.2. Persistence and degradability

Antioxidant mixture:  
Biodegradable.

#### 12.3. Bioaccumulative potential

Antioxidant mixture:  
BCF(regression based estimate) = 5.77 L/kg  
BCF (Arnot-Gobas method)0.8954 L/kg  
BAF (Arnot-Gobas method) 2.975 L/kg

#### 12.4. Mobility in soil

Antioxidant mixture:  
log Koc: 8.57

#### 12.5. Results of PBT and vPvB assessment

No data available.

#### 12.6. Other adverse effects

No data available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product disposal: Observe specific national regulation.  
Contaminated packaging: Contaminated, empty containers must be disposed of as chemical waste.

### SECTION 14: Transport information

Domestic transport (RID/ADR): Not regulated under UN Transport of Dangerous Goods.  
Sea transport (IMDG): Not regulated under UN Transport of Dangerous Goods.  
Air transport (ICAO/IATA): Not regulated under UN Transport of Dangerous Goods.

### SECTION 15: Regulatory information

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

##### 15.1.1 Regulations

This safety data sheet is in compliance with the fourth revised edition of Globally Harmonized System of Classification and Labelling of Chemical (GHS).

##### 15.1.2 International/national regulations

No data available

#### 15.2. Chemical safety assessment

No data available.

### SECTION 16: Other information

#### 16.1 NFPA hazard classification



Hazard Scale:  
0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### 16.2 Canadian WHMIS symbols

None

#### 16.3 Literature references

- IFA GESTIS - International limit values for chemical agents - occupational exposure limits (OELs), [http://www.dguv.de/ifa/en/gestis/limit\\_values/index.jsp](http://www.dguv.de/ifa/en/gestis/limit_values/index.jsp)
- The fourth revised version of Globally Harmonized System of Classification and Labelling of Chemical (GHS) .

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

### Limited warranty

There are no warranties which extend beyond the product description herein, and seller makes no warranty, express or implied, of fitness for particular use, merchantability or otherwise with respect to product, whether used singly or in combination with other substances or in any process, except that product sold hereunder shall conform to seller's standard sales specifications as of the date of the shipment. Without limiting the foregoing, seller does not recommend or endorse the use of product(s) in any medical application and specifically disclaims any representation or warranty, express or implied, of suitability or fitness for use or otherwise, with respect to product(s)' use in any medical application. Buyer represents and warrants that no product(s) purchased hereunder will be used in or resold into any commercial or developmental manner in connection with medical applications without seller's prior express written acknowledgement, further, buyer agrees that it will make no representations, express or implied, to any person to the effect that seller recommends or endorses the use of product(s) purchased hereunder in any medical application.

*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.*