

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

1.1. Product identifier

Trade name or designation of the mixture	TAIPOL® SBS-3201, SBS-3206, SBS-4202, SBS-4230, SBS-4270
Registration number	-
Synonyms	None.
Issue date	10-May-2017
Version number	02
Revision date	15-June-2017
Supersedes date	-

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

Identified uses	Use as shoe soles, adhesives, hot melts, plastic modifications, asphalt modifications.
Uses advised against	-

1.3. Details of the supplier of the safety data sheet

Manufacturer	TSRC Corporation No.2, Singgong Rd., Dashe Dist., Kaohsiung City 815 Taiwan R.O.C.
Telephone	+886-7-3513811
e-mail	tpe.msds@tsrc-global.com
Supplier	TSRC (Lux.) Corporation S.a.r.l. 34 - 36 Avenue de Liberté L-1930 Luxembourg Grand Duchy of Luxembourg
Telephone	+352 26 29 72-1
e-mail	tpe.msds@tsrc-global.com
Contact person	Product Safety
1.4. Emergency telephone number	+1-760-476-3961
Access code	333558

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary	Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.
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2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms	None.
Signal word	None.
Hazard statements	The mixture does not meet the criteria for classification.

Precautionary statements

Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Supplemental label information None.

2.3. Other hazards Not a PBT or vPvB substance or mixture. The material may form dust and can accumulate electrostatic charges, which may cause an electrical spark (ignition source).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Styrene/Butadiene Copolymer	>98	9003-55-8	-	-	
Classification:	-				

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Components not listed are either non-hazardous or are below reportable limits.

SECTION 4: First aid measures

General information First aid personnel must be aware of own risk during rescue.

4.1. Description of first aid measures

Inhalation	If symptomatic, move to fresh air. Get medical attention if symptoms persist.
Skin contact	Flush skin with large amounts of water. For contact with hot material, immediately immerse affected area of skin in large amounts of cold water to dissipate heat and reduce the extent of thermal burns. Do not peel polymer from the skin.
Eye contact	Do not rub eyes. Flush eyes with water as a precaution. Get medical attention if irritation develops or persists. If molten material contacts the eye, immediately flush with plenty of water for at least 15 minutes.
Ingestion	Have victim rinse mouth thoroughly with water.

4.2. Most important symptoms and effects, both acute and delayed Irritation of eyes and mucous membranes. Irritation of nose and throat.

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

SECTION 5: Firefighting measures

General fire hazards The product is not flammable. Will burn if involved in a fire.

5.1. Extinguishing media

Suitable extinguishing media	Water spray, foam, dry powder or carbon dioxide.
Unsuitable extinguishing media	None.

5.2. Special hazards arising from the substance or mixture Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterised.

5.3. Advice for firefighters

Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.
Special fire fighting procedures	Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Avoid inhalation of fumes from molten product. Surfaces may become slippery after spillage. Wear appropriate personal protective equipment.
For emergency responders	Use personal protection as recommended in section 8 of the SDS.

6.2. Environmental precautions Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up Scrape up with shovels into a suitable container for recycle or disposal. Where possible allow molten material to solidify naturally.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Avoid inhalation of dust and contact with skin and eyes. Avoid contact with hot material. The product may form dust and can accumulate electrostatic charges, which may cause an electrical spark (ignition source). Use proper grounding procedures. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Maximum storage temperature 35 °C. Store in a cool, dry, well-ventilated place. Keep away from incompatible materials, open flames and high temperatures. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques.

7.3. Specific end use(s) Use as shoe soles, adhesives, hot melts, plastic modifications, asphalt modifications.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits No exposure limits noted for ingredient(s).
Biological limit values No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures Follow standard monitoring procedures.
Derived no effect levels (DNELs) Not available.
Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Observe occupational exposure limits and minimise the risk of inhalation of dust and fumes. Use explosion-proof equipment if high dust/air concentrations are possible.

Individual protection measures, such as personal protective equipment

General information Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection If contact with material may occur, safety glasses and face shield are recommended. Wear a face shield when working with molten material.

Skin protection

- **Hand protection** When material is heated, wear gloves to protect against thermal burns.
- **Other** For molten product, use any type rubber thermal insulating gloves and other clothing as necessary to protect from thermal burns. Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection In case of inadequate ventilation or when the product is heated, use suitable respiratory equipment with gas filter (type A2). In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P2).

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Handle in accordance with good industrial hygiene and safety practices.

Environmental exposure controls Contain spills and prevent releases and observe national regulations on emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid.
Form Solid.(Pellet)
Colour White.
Odour Odourless.
Odour threshold Not available.
pH Not applicable.
Melting point/freezing point Not available.
Initial boiling point and boiling range Not available.
Flash point > 288,0 °C (> 550,4 °F)
Evaporation rate Not available.
Flammability (solid, gas) Not applicable.
Upper/lower flammability or explosive limits

- Flammability limit - lower (%)** Not available.
- Flammability limit - upper (%)** Not available.

Vapour pressure Not applicable.
Vapour density Not applicable.
Relative density Not available.
Solubility(ies) Insoluble in water.
Partition coefficient (n-octanol/water) Not available.

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Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2. Other information	No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	Stable at normal conditions.
10.2. Chemical stability	Stable at normal conditions.
10.3. Possibility of hazardous reactions	Hazardous polymerisation does not occur.
10.4. Conditions to avoid	High temperatures. Avoid dust formation.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system. When heated, the vapours/fumes given off may cause respiratory tract irritation.
Skin contact	Molten material will produce thermal burns.
Eye contact	Dust may irritate the eyes. Molten material will produce thermal burns.
Ingestion	May cause discomfort if swallowed.

Symptoms Irritation of eyes and mucous membranes. Irritation of nose and throat.

11.1. Information on toxicological effects

Acute toxicity	Dusts may irritate the respiratory tract, skin and eyes.
Skin corrosion/irritation	Contact with molten material may cause thermal burns.
Serious eye damage/eye irritation	May cause irritation through mechanical abrasion.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
Skin sensitisation	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 hazard	Due to the physical form of the product it is not an aspiration hazard.
Mixture versus substance information	No information available.
Other information	Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

SECTION 12: Ecological information

12.1. Toxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
12.2. Persistence and degradability	No data available.
12.3. Bioaccumulative potential	No data available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
Mobility in general	The product is insoluble in water and will spread on the water surface.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose in accordance with all applicable regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code 07 02 13

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Dispose of contents/container in accordance with local/regional/national/international regulations. Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 as amended. This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

National regulations

Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

DNEL: Derived No-Effect Level.
PNEC: Predicted No-Effect Concentration.
PBT: Persistent, bioaccumulative and toxic.
vPvB: Very Persistent and very Bioaccumulative.

References

EPA: AQUIRE database
HSDB® - Hazardous Substances Data Bank

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

None.

Training information

Follow training instructions when handling this material.

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.

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 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.