

เอกสารเพื่อความปลอดภัยในการปฏิบัติงานกับสารเคมี (SBR1502)_ฉบับอังกฤษ

รหัสเอกสาร S-PSM-BE-S01043

วันที่มีผลบังคับใช้

4 พฤษภาคม 2560

พิมพ์ครั้งที่ 4

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1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Trade Name : SBR 1502

Chemical Name : Styrene Butadiene copolymer

Molecular Formular : $(\text{CH}_2-\text{CH}=\text{CH}-\text{CH}_2-\text{CH}_2-\text{CH})_n$



Synonyms : -

1.2 Use : Product : Raw material for the production of tires

1.4 Manufacturer: BST Elastomers Company Limited

1.5 Address : 5/1, I-7 Rd. Maptaphut Industrial Estate, Muang District, Rayong 21150

Tel. : 0-3868-3314 Fax. : 0-3866-8-3315

2. HAZARD IDENTIFICATION

2.1 Classification of Substance or Mixture

Classification according to Directive 1999/45/EC : Not classified

GHS classification : This product is not classified as hazardous.

Physical Hazards :

Explosives :	Not classified
Flammable gases :	Not applicable
Flammable aerosols :	Not applicable
Oxidizing gases :	Not applicable
Gases under pressure :	Not applicable
Flammable liquids :	Not applicable
Flammable Solids :	Not classified
Self-reactive substances and mixture	Not classified
Substances and mixtures which, in contact with water, emit flammable gases	Not classified
Oxidizing liquids :	Not applicable
Oxidizing solids :	Not classified
Organic peroxides :	Not classified

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Corrosive to metals : Not classified

Health Hazards :

Acute toxicity (oral) : Not classified

Acute toxicity (Dermal) : Classification not possible

Acute toxicity (Inhalation) : Classification not possible

Serious eye damage/irritation : Not applicable

Respiratory sensitization : Classification not possible

Skin sensitization : Not classified

Germ cell mutagenicity : Classification not possible

Carcinogenicity : Not classified

Reproductive toxicity : Classification not possible

Specific target organ toxicity

(Single exposure) : Classification not possible

(Repeated exposure) : Classification not possible

Aspiration hazards : Not applicable

Environmental hazards :

Hazards to aquatic environment

(Acute) : Not classified

(Chronic) : Not classified

2.2 Label Elements :

Pictogram or Symbol : Not applicable

Signal word : Not applicable

Hazard statement : Not applicable

2.3 Other Hazards

Other hazards which do not result in classification

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Precautionary Statements : Not expected to produce significant adverse health effect when the recommended instruction for use are followed. May cause mechanical irritation (abrasion). Toxic and irritating gases/fumes maybe given off during burning or thermal decomposition. Contact with hot material will cause thermal burns.

3.COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name : Styrene Butadiene Copolymer

Synonyms : Styrene Butadiene Rubber (SBR)

Name	CAS No.	%
Styrene Butadiene Copolymer	9003-55-8	100

4. First - aid measures

4.1 Description of first aid measures

Skin : Wash skin with soap and water.

Eye : Wash eyes with large amounts of water occasionally lifting upper and lower lids, until no evidence of chemical remains at least 15-20 minutes.

Inhalation : Although this product is not known to cause respiratory problems, if breathing is difficult , remove to fresh air and provide oxygen.

Ingestion : Ingestion is not considered a potential route of exposure.

4.2 Potential acute health effects

Skin : May cause slight skin irritation .

Eye : No hazards expected in normal industrial use at room temperature.

Inhalation : Irritating vapors may be formed when product is processed at high temperature.

Ingestion : Ingestion is not considered a potential route of exposure.

4.3 Potential Chronic health effects.

Chronic effects : No known significant effects or critical hazards

Carcinogenicity : No carcinogenic substances as defined by IARC , NTP and/or OSHA.

4.4 Notes to physician : No specific treatment . Treat symptomatically.

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5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media : Water and dry chemical.

Unsuitable Extinguishing media : Carbon dioxide is not generally recommended for use on class A fire (SBR would be considered ordinary combustibles-NFPA defined class A) as lack of cooling capacity may result in re-ignition.

5.2 Special Hazards arising from the substance or mixture

Hazards from the substance or mixture : Toxic and irritating gases/fumes maybe given off during burning or thermal decomposition

Hazardous decomposition products : Carbon monoxide (from combustion)

5.3 Advice for Firefighters

Special precautions for fire fighter : Avoid breathing smoke , fume , and decomposition product. As in any fire , water self-contained breathing apparatus pressure demand MSHA/NIOSH (approved or equivalent) and full protective equipment.

Special protective equipment for fire-fighters : Should wear appropriate protective equipment and SCBA with a full face-piece operated in positive pressure mode.

5.4 Flash Point : No data available.

5.5 Explosion Limits : No data available

5.6 Auto ignition Temperature : No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precaution : No special measure required.

Protective equipment and emergency procedure : No special measure required.

6.2 Environmental Precaution : Sweep up and place in suitable containers. Do not flush spilled material into sewer. Keep unnecessary people away.

6.3 Method and materials for containment and cleaning up.

Small spill : Take up mechanically , Treat or dispose of waste material in accordance with all local and national requirements.

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Large spill : Handle as solid waste. Vacuum or sweep up material and place in a disposal container.

7. Handling and Storage

7.1 Precaution for safe handling :

Make efforts to keep workplace clean and tidy, and avoid using fire.

- Since there is possibility of volatile matter generating during work, it may cause irritation to the eyes.

- After work, before smoking or eating, wash the hands well, and gargle.

7.2 Condition for safe storage , including any incompatibilities :

- Indoor to prevent deterioration, avoid the following.

- Exposure to the direct sun rays.

- High temperature, high humidity.

- Outdoor storage.

- Even in the case of indoor storage, avoid storing in high-temperature area or near UV-emitting lights such as the incandescent lamps and mercury lamps.

- In case of bulk shipments, indoor to prevent crumbling of the bulk cargo, keep the height as low as possible

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameter

Exposure limit value : No Data Available

8.2 Exposure Control

Occupational exposure controls :

ACGIH ; not data available

OSHA ; not data available

Thailand Regulation ; not data available

Technical measure : Use process enclosures , local exhaust ventilation or other

engineering controls to keep airborne levels below recommended exposure limits. If

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user operation generate dust , fume or dust use ventilation to keep exposure to airborne contaminants below the exposure limit.

Environment exposure controls

Technical measure : Emission from ventilation or work process equipment should be check to ensure comply with the requirement of environmental protection legislation. In some case, fume scrubbers , filters or engineering modifications to the process equipment will be necessary to reduce emission to acceptable levels.

8.3 personal protection measure

Respiratory protection : Respirator with a dust and mist filter in case dust formation.

Protective Gloves : Employee should wear appropriate protective gloves to prevent contact with this substance.

Eye Protection : Employee must wear splash-proof or dust resistant safety goggles to prevent eye contact with this substance.

Skin : Employee should wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information Appearance

Physical State : Solid (Rubber bales)

Colour : Amber

Odour : slight odor

9.2 Odour threshold limit : No data available.

9.3 pH : No data available.

9.4 Melting Point / Freezing point : No data available.

9.5 Initial boiling point and boiling range : No data available.

9.6 Flash point : Closed cup : No data available.

9.7 Evaporation Rate : No data available

9.8 Flammability (Solid/Gas): No data available.

9.9 Upper Flammability/Explosive limits : No data available.

Lower Flammability/Explosive limits : No data available.

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9.10 Vapor Pressure : No data available.

9.11 Vapor density : No data available.

9.12 Relative density : No data available.

9.13 Solubility : Insoluble in water.

9.14 partition Coefficient : n-octanol / water : No data available

9.15 Auto ignition temperature : No data available.

9.16 Decomposition temperature : No data available.

9.17 Viscosity: No data available.

9.18 Molecular Weight: No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Stability: Stable

10.3 Possibility of hazardous reaction : Under normal condition storage and use , hazardous reaction will not occur.

10.4 Conditions to Avoid : No data available.

10.5 Incompatible material: There are no known materials which are incompatible with this product.

10.6 Hazardous Decomposition Products : Carbon monoxide (from combustion)

11. TOXICOLOGICAL INFORMATION

11.1 Potential acute health effects

Skin : May cause mechanical irritation (abrasion). Contact with hot material will cause thermal burns.

Eye : May cause mechanical irritation (abrasion).

Inhalation : May cause mechanical irritation (abrasion).

Ingestion : No known significant effects or critical hazards.

11.2 Potencial Chronic health effects.

Chronic effects : No known significant effects or critical hazards

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Carcinogenicity : No carcinogenic substances as defined by IARC , NTP and/or OSHA.

11.3 Acute Toxicity Level :

Acute oral toxicity : Not available

Acute dermal toxicity : Not available

Acute inhalation toxicity : Not available

12. ECOLOGICAL INFORMATION

12.1 Eco-Toxicity: No data available.

12.2 persistence and Degradability : No data available.

12.3 Bioaccumulative Potential : No data available.

12.4 Mobility in soil : No data available.

12.5 Other Adverse effect : No data available.

The product is practically insoluble in water. No ecological problems are to be expected if the product is properly handling.

13. DISPOSAL CONSIDERATIONS

13.1 Observe all federal, state and local regulations disposing of this substance.

14. TRANSPORT INFORMATION

14.1 UN No. : Not available

14.2 UN Proper shipping name : Not available

14.3 Transport Hazard class : Not available

14.4 Packing group : Not available

14.5 Marine pollutants : Not available

14.6 Transport in bulk according to annex II of MARPOL73/78 and the ICB code : Not available

14.7 Special precautions for user/Additional information :

15. REGULATORY INFORMATION

เอกสารนี้เป็นเอกสารใช้ภายในบริษัท เท่านั้น เอกสารฉบับควบคุมจะอยู่ในรูปสื่ออิเล็กทรอนิกส์เท่านั้น
นอกเหนือจากนี้จะไม่อยู่ภายใต้การควบคุม ห้ามนำไปใช้ในการปฏิบัติงานโดยเด็ดขาด

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15.1 Thailand Regulation

- **Labour Protection Act B.E.2541** : Material is not listed

- **Hazardous Substance Act B.E. 2535** : Material is not listed

15.2 CLP Regulation : Material is not listed

15.3 European Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures, ; Material is listed in Annex VI

15.4 OSHA : No data available.

15.5 TSCA : No data available.

15.6 SARA : No data available

15.7 REACH Regulation : Material is not listed

16. OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH : American Conference of Government Industrial Hygienists

NFPA : National Fire Protection Agency

NIOSH : National Institute for Occupational Safety & Health

OSHA : Occupational Safety & Health Administration

IARC : International Agency for Research on Cancer

SARA : Superfund Amendments and Reauthorization Act.

GHS : Globally Harmonized System

TSCA : Toxic Substance Control Act

WHMIS : Workplace Hazardous Materials Information System

LD50 : Lethal Dose 50%

CNS : Central Nervous System NTP National Toxicology Program

EC50 : Effective Concentration NOAEL No Observable Adverse EffectLevel

EC50 : Effective Concentration 50% NOEC No Observed Effect Concentration

PEL : Permissible Exposure Limit

STEL : Short-term Exposure Limit

TLV : Threshold Limit Value

TWA : Time Weighted Average

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Remark

Additional Information Available from

Name: BST Elastomers Company Limited

Address: 5/1, I-7 Road. Maptaput Industrial Estate, Muang District, Rayong 21150

Tel. : +66(0) 3869-8698 Fax. : +66(0) 3869-8690