

เอกสารเพื่อความปลอดภัยในการปฏิบัติงานกับสารเคมี SBR 1712

รหัสเอกสาร S-PSM-BE-S01044 วันที่มีผลบังคับใช้ 26 มกราคม 2569

พิมพ์ครั้งที่ 9 หน้า 1/10 ID-0136/26

1. Identification of the substance and of the supplier

1.1 Trade Name : Styrene Butadiene Rubber (SBR-Oil Grade) or SBR 1712

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



1.3 Manufacturer /Import : BST Elastomers Company Limited

1.4 Address : 5/1, I-7 Rd. Map Ta Phut Industrial Estate, Muang District, Rayong
21150, Thailand

Phone number : (+66) 3869 8698

Fax : (+66) 3869 8699

Emergency Phone number : (+66) 3869 8601 (Mutual Aid Coordinator Center)

1.5 Relevant identified uses of the substance or mixture and uses advised against : Not applicable

1.6 Identified uses : Raw material for the production of tires. Prohibited for use in the production of food-grade products.

2. Hazards Identification

2.1 Classification of the mixture according to Globally Harmonized System (GHS) standards (GHS hazard statements and category)

Physical Hazard :

Not available

Health Hazard :

Carcinogenicity Category 1B

Environmental Hazard :

Not available

Others hazard :

Not available

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2.2 GHS label elements



Hazard Pictogram :
Signal Word : Danger
Hazard Statement :

H350 May cause cancer

Precautionary Statement :

P203 Obtain, read and follow all safety instructions before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection

P318 if exposed or concerned, get medical advice.

P405 Store locked up.

P501 Dispose of contents/container

2.3 There hazards which do not result in classification : Not available

3. Composition/ Information on Ingredients

3.1 Chemical type (Substance/Mixture) : Mixture

3.2 Chemical identity : Extended Oil Butadiene Styrene copolymer

3.3 Common name and synonym : Not available

3.4 CAS number : Not available

3.5 EC number : Not available

3.6 Impurities and stabilizing additives : Not available

3.7 Ingredient :

Substances	CAS No.	EC No.	% by weight
Styrene Butadiene Copolymer	9003-55-8	618-370-2	73%
Aromatic Extended Oil	64742-04-7	265-103-7	27%

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4. First Aid Measures

4.1 Description of first aid measures

Skin : Wash skin with soap and water. Remove contaminated clothing. Seek medical attention if irritation develops.

Eyes : 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 Most important symptoms and effects, both acute and delayed

Potential acute health effects :

Skin : May cause slight skin irritation .

Eyes : 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.

Potential Chronic health effects : No known significant effects or critical hazards

4.3 Indication of any immediate medical attention and special treatment needed Notes to :

No specific treatment. Treat symptomatically.

5. Fire Fighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media : To extinguish combustible residues of this product, use water fog, carbon dioxide, dry chemical or foam.

Unsuitable Extinguishing Media : Not available

5.2 Special Exposure Hazards

Hazards from the substance or mixture : Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

Hazardous decomposition Products : Thermal decomposition may release acrid smoke and irritation fumes

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5.3 Advice for Firefighters

Special Fire-Fighting Procedures : Keep up-wind to avoid fumes. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Cool containers exposed to flames with water until well after the fire is out. Fight advanced or massive fires from safe distance or protected location. Avoid inhalation of materials or combustion by-products.

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

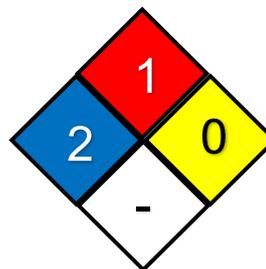
5.4 NFPA 704 Diamond

Health hazard (Blue) : 2

Fire hazard (Red) : 1

Reactivity (Yellow) : 0

Specific hazard (White) : -



5.5 Fire and explosion protection : Not available

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures : Wear protective clothing. Avoid heat, flame and other sources of ignition. Keep upwind. Do not handle broken packages without protective equipment. Provide adequate ventilation. Keep unnecessary people away, isolate hazard and deny entry. Avoid inhalation of vapors and contact with skin and eyes.

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

6.3 Methods 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.

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

6.4 Spill Management : Not available

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7. Handling and Storage

7.1 Precautions 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 Conditions for safe storage, including any incompatibilities :

- Store and handle in accordance with all current regulations and standards.
- Store in tightly closed original container in a dry, cool and well-ventilated place
- Protect against direct sunlight
- Do not store near heat sources or expose to high temperatures.

8. Exposure Controls/ Personal Protection

8.1 Control parameters

TLV-TWA (ACGIH)	: Not available
TLV-STEL (ACGIH)	: Not available
TLV-C (ACGIH)	: Not available
IDLH (NIOSH)	: Not available

8.2 Personal protective equipment

- Respirators** : Respirator with a dust and mist filter in case dust formation.
- Skin** : Employee should wear appropriate protective gloves to prevent contact with this substance.
- Eyes** : Employee must wear splash-proof or dust resistant safety goggles to prevent eye contact with this substance.
- Other Protection** : Employee should wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

8.3 Appropriate engineering controls : User operation generate dust , fume or dust use ventilation to keep exposure to airborne contaminants below the exposure limit.

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9. Physical and chemical properties

9.1 General information Appearance

Physical State : Solid (Rubber bales)

Color : Greenish brown or dark brown

9.2 Odor : slight odor

9.3 Odor threshold limit : Not available

9.4 pH : Not available

9.5 Melting point : Not available

9.6 Freezing point : Not available

9.7 Boiling point : Not available

9.8 Flash point : 246 °C

9.9 Evaporation rate : Not available

9.10 Flammability (solid, gas) : No, but the product will burn if ignited

9.11 Lower Flammability/Explosive limits (LFL/LEL) : Not available

9.12 Upper Flammability/Explosive limits (UFL/UEL) : Not available

9.13 Vapor pressure : Not available

9.14 Vapor density : Not available

9.15 Relative density : 0.940 g/cm³

9.16 Solubility : Insoluble in water.

9.17 Partition coefficient : n-octanol/water : Not available

9.18 Auto-ignition temperature : >388 °C

9.19 Decomposition temperature : Not available

9.20 Viscosity : Not available

9.21 Molecular Weight : Not available

9.22 Specific gravity (Water=1) : 0.94

9.23 Surface Tension : Not available

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10. Stability and reactivity

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

10.2 Chemical stability : Stable at ambient temperature and pressure.

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

10.4 Condition to avoids : Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

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

10.6 Hazardous decomposition products : During fire, toxic gases (CO, CO₂) are formed. Hydrocarbon.

11. Toxicological information

11.1 Information on toxicological effects

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

Eyes : May cause mechanical irritation (abrasion).

Inhalation : May cause mechanical irritation (abrasion).

Ingestion : No known significant effects or critical hazards.

11.2 Potential Chronic health effects : No known significant effects or critical hazards

11.3 Routes of Entry : Not available

11.4 Acute toxicity

11.4.1 LD50

Oral (mg/kg) : Not available

Dermal (mg/kg) : Not available

11.4.2 LC50

Inhalation (ppm, mg/m³) : Not available

11.5 Carcinogenicity/Germ cell mutagenicity (GHS or IARC) : Carc. 1B

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12. Ecological Information

- 12.1 Eco-Toxicity** : Not available
- 12.2 Persistence and Degradability** : Not available
- 12.3 Bioaccumulative potential** : Not available
- 12.4 Mobility in soil** : Not available
- 12.5 Other adverse effects** : 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 Waste and safe handling information** : Not available
- 13.2 Waste treatment methods** : Disposal should be in accordance with local, state and national legislation. Waste water has to be treated. Packaging waste (paper bags) shall be collected and send for recycling. Plastic waste shall be removed to disposal.
- 13.3 Contaminated containers/Packages** : Not available

14. Transport information

- 14.1 UN number** : Not available
- 14.2 UN proper shipping name** : Not regulated
- 14.3 Transport hazard class :**
- U.S. DOT hazard class : Not regulated
 - Canada TDG hazard class : Not regulated
 - Europe ADR/RID hazard class : Not regulated
 - IMDG Code (ocean) hazard class : Not regulated
 - ICAO/IATA (air) hazard class : Not regulated
- 14.4 Packing group** : Not applicable
- 14.5 Marine pollutant** : Not applicable
- 14.6 Transport in bulk according to annex II of MARPOL73/78 and the ICB code** : Not available
- 14.7 Special precautions** : Not available

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14.8 Further information : Not available

15. Regulatory Information

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

15.1.1 Thailand Regulation

Ministry of Labour : Not available
Ministry of Industry : Not available
Ministry of Public Health : Not available
Ministry of Natural Resources and Environment : Not available
Ministry of Transport : Not available
Further information : Not available

15.1.2 Federal and State Regulations (Foreign country) :

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

OSHA : Not available
TSCA : Not available
SARA : Not available
REACH Regulation : Material is not listed

16. Other information

16.1 References :

16.2 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
LD50 : Lethal Dose 50%

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CNS	: Central Nervous System NTP National Toxicology Program
EC50	: Effective Concentration NOAEL No Observable Adverse Effect Level
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

16.3 Further information : Not available