

# SAFETY DATA SHEET

Buna SE 1502 H Triunfo

## Section 1. Identification

GHS product identifier : Buna SE 1502 H Triunfo

Use of the substance/  
mixture : crude product for the production of tires

## Section 2. Hazards identification

Classification of the  
substance or mixture : Not classified.

### GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Other hazards which do not  
result in classification : None known.

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product definition : Copolymer consisting of styrene and butadiene (SBR) CAS No.:  
9003-55-8

Other means of  
identification : Butadiene rubber (BR)

### CAS number/other identifiers

CAS number : Not applicable.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-aid measures

### Description of necessary first aid measures

Eye contact : Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Get medical attention if irritation develops.

### Most important symptoms/effects, acute and delayed

## Section 4. First-aid measures

### Potential acute health effects

|              |   |
|--------------|---|
| Eye contact  | : No known significant effects or critical hazards. |
| Inhalation   | : No known significant effects or critical hazards. |
| Skin contact | : No known significant effects or critical hazards. |
| Ingestion    | : No known significant effects or critical hazards. |

### Over-exposure signs/symptoms

|              |                     |
|--------------|---------------------|
| Eye contact  | : No specific data. |
| Inhalation   | : No specific data. |
| Skin contact | : No specific data. |
| Ingestion    | : No specific data. |

### Indication of immediate medical attention and special treatment needed, if necessary

|                            |  |
|----------------------------|--|
| Notes to physician         | :  |
| Specific treatments        | : No specific treatment.   |
| Protection of first-aiders | : No action shall be taken involving any personal risk or without suitable training. |

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

|                                |   |
|--------------------------------|---|
| Suitable extinguishing media   | : Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | : None known.   |

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

|                             |   |
|-----------------------------|---|
| For non-emergency personnel | : No special measures required.   |
| For emergency responders    | : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |

Environmental precautions : No special measures required.

### Methods and materials for containment and cleaning up

|             |                         |
|-------------|-------------------------|
| Small spill | : Take up mechanically. |
| Large spill | : Take up mechanically. |



## Section 7. Handling and storage

|   |  |
|---|--|
| <b>Precautions for safe handling</b>                                | : Provided good ventilation and/or local exhaust systems are used, the Occupational Exposure Limit(s) stated in Chapter 8 should not be exceeded.<br><br>Avoid inhaling vapours. Avoid inhaling dust. Grease skin. Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. When using do not eat, drink or smoke. |
| <b>Conditions for safe storage, including any incompatibilities</b> | : Do not store above the following temperature: 40°C (104°F). Store in a dry place.  |
| <b>Remarks</b>  | : Keep away from direct sunlight or strong incandescent light. Protect from moisture.  |

## Section 8. Exposure controls/personal protection

### Control parameters

The regulations for the substances listed below must be observed when processing this product, particularly if processing takes place at elevated temperatures. In our experience the provision of effective fresh-air and exhaust ventilation equipment at the points where vapors may be generated will ensure compliance with the tolerance limits quoted below.

|  |  |
|--|--|
| <b>Exposure limit values</b>             | : Not available.   |
| <b>Recommended monitoring procedures</b> | : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required. |
| <b>Appropriate engineering controls</b>  | : Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.   |
| <b>Environmental exposure controls</b>   | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.   |

### Individual protection measures

|                               |   |
|-------------------------------|---|
| <b>Hygiene measures</b>       | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. |
| <b>Eyeface protection</b>     | : Protective goggles with side shield or tightly fitting protective goggles   |
| <b>Skin protection</b>        |   |
| <b>Hand protection</b>        | : Protective gloves of leather, contaminated or damaged gloves should be replaced.<br>Recommended: (< 1 hour) Polyvinyl chloride - PVC  |
| <b>Other skin protection</b>  | : Skin covering working clothes; wear dust-proof overalls if large quantities of dust are generated.  |
| <b>Respiratory protection</b> | : In case of dust formation use respiratory equipment with filter type particle filter P1 according to DIN EN 143.  |

## Section 9. Physical and chemical properties

### Appearance

|  |   |
|--|---|
| Physical state                               | : Solid. [bales]                                    |
| Colour                                       | : White to yellowish.                               |
| Odour  | : Characteristic.                                   |
| Odour threshold                              | : Not available.                                    |
| pH   | : Not available.                                    |
| Melting point                                | : Not available.                                    |
| Boiling point                                | : Not available.                                    |
| Flash point                                  | : Open cup: >200°C (>392°F) [Cleveland (ASTM D-92)] |
| Burning time                                 | : Not available.                                    |
| Burning rate                                 | : Not available.                                    |
| Evaporation rate                             | : Not available.                                    |
| Flammability (solid, gas)                    | : Not available.                                    |
| Lower and upper explosive (flammable) limits | : Not available.                                    |
| Vapour density                               | : Not available.                                    |
| Density                                      | : 0,94 kg/L (20°C)                                  |
| Relative density                             | : Not available.                                    |
| Solubility                                   | : Insoluble in the following materials: cold water  |
| Auto-ignition temperature                    | : 320°C (608°F)                                     |
| Decomposition temperature                    | : Not available.                                    |
| SADT   | : Not available.                                    |
| Viscosity                                    | : Not available.                                    |

## Section 10. Stability and reactivity

|                                    |  |
|------------------------------------|--|
| Reactivity                         | : No specific test data related to reactivity available for this product or its ingredients.   |
| Chemical stability                 | : The product is stable.   |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur.  |
| Conditions to avoid                | : No specific data.  |
| Incompatible materials             | : No specific data.  |
| Hazardous decomposition products   | : Caused by smouldering and incomplete combustion toxic fumes mainly consisting of CO and CO <sub>2</sub> may be developed. Degradation products of the polymers and their additives may also be formed. |

## Section 11. Toxicological information

Under the recommended processing conditions small amounts of emitted substance (e.g. residual monomers, residual solvents, decomposition products) may be discharged. According to our experience and information the product has no harmful effects on health if properly handled.

### Information on toxicological effects

Not available.

### Irritation/Corrosion

Not available.

### Sensitisation

Not available.

### Specific target organ toxicity (single exposure)



## Section 11. Toxicological information

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Dermal.

### Potential acute health effects

Eye contact : No known significant effects or critical hazards.  
 Inhalation : No known significant effects or critical hazards.  
 Skin contact : No known significant effects or critical hazards.  
 Ingestion : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.  
 Inhalation : No specific data.  
 Skin contact : No specific data.  
 Ingestion : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

Potential immediate effects : Not available.  
 Potential delayed effects : Not available.

#### Long term exposure

Potential immediate effects : Not available.  
 Potential delayed effects : Not available.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route          | ATE value (Acute Toxicity Estimates) |
|----------------|--------------------------------------|
| Not available. |                                      |

## Section 12. Ecological information

The product is practically insoluble in water. In view of its consistency and insolubility in water, no ecological problems are to be expected if the product is properly handled. This product is not readily biodegradable.

### Toxicity

Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

Soil/water partition coefficient ( $K_{oc}$ ) : Not available.

## Section 12. Ecological information

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                              | SANS      | IMDG           | IATA           |
|------------------------------|-----------|----------------|----------------|
| UN number                    | -         | -              | -              |
| UN proper shipping name      | -         | -              | -              |
| Transport hazard class(es)   | -         | -              | -              |
| Packing group                | -         | -              | -              |
| Environmental hazards        |           | No             | No             |
| Special precautions for user | Forbidden | Not regulated. | Not regulated. |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Hazard notes:

Not dangerous cargo.  
Keep separated from foodstuffs.

## Section 15. Regulatory information

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

## Section 16. Other information

### History

Date of issue/Date of revision : 2013-11-04  
Date of previous issue : No previous validation  
Version : 1

Indicates information that has changed from previously issued version.

### Notice to reader

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance.