MATERIAL SAFETY DATA SHEET



LANXESS Corporation Product Safety & Regulatory Affairs 111 RIDC Park West Drive Pittsburgh, PA 15275-1112 USA

TRANSPORTATION EMERGENCY

CALL CHEMTREC: INTERNATIONAL:

(800) 424-9300 (703) 527-3887

NON-TRANSPORTATION

LANXESS Emergency Phone:(800) 410-3063LANXESS Information Phone:(800) LANXESS

1. Product and Company Identification

Product Name: Material Number: Chemical Family: Chemical Name: Synonyms: BUNA SE VP PBR 4022 56674857 Synthetic Rubber Styrene-butadiene copolymer SBR

2. Hazards Identification

Emergency Overview

CAUTION! Color: Black Form: Solid bales Odor: Slight. Irritating gases/fumes may be given off during burning or thermal decomposition. At temperatures above 392 F (200 C), the product decomposes exothermically with possibility of ignition. Contact with hot material will cause thermal burns.

Potential Health Effects

Primary Routes of Entry:

Skin Contact, Eye Contact, Inhalation

Medical Conditions Aggravated by None known. Exposure:

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

<u>General Effects of Exposure</u> Acute Effects of Exposure For Product: <u>BUNA SE VP PBR 4022</u>

Not expected to cause any adverse acute health effects. Mechanical irritation (i.e., abrasion) may occur if material is introduced into the eye. Eyes may become red, feel scratchy and may tear. Gases and fumes evolved during the thermal processing or decomposition of this material may irritate the eyes, skin or respiratory tract.

Material Name: BUNA SE VP PBR 4022

Page: 1 of 7 Report Version: 1.0

Chronic Effects of Exposure For Product: <u>BUNA SE VP PBR 4022</u>

Not expected to cause any adverse chronic health effects.

Carcinogenicity:

No Carcinogenic substances as defined by IARC, NTP and/or OSHA.

3. Composition/Information on Ingredients

Hazardous Components

The following potentially hazardous ingredient(s) are used to formulate this product. As supplied, the ingredient(s) are bound in the polymer matrix. Because they are bound in the matrix, they are not expected to create any unusual hazards when handled and processed according to good manufacturing and industrial hygiene practices and the guidelines provided in this MSDS.

Weight %	<u>Components</u>	CAS-No.
10 - 20%	Distillates, petroleum, hydrotreated	64742-52-5
	heavy naphthenic	
10 - 20%	Residues (petroleum), vacuum	64741-56-6

OTHER INGREDIENTS

The following potentially hazardous ingredient(s) are contained at levels below disclosure requirements and are provided for informational purposes only., The concentrations reported below in units of parts per million (ppm) or parts per billion (ppb) are maximum values.

Weight %	Components	CAS-No.
Trace	Hexane	110-54-3

4. First Aid Measures

Eye Contact

In case of contact, flush eyes with plenty of lukewarm water.

Skin Contact

In case of skin contact, wash affected areas with soap and water. Get medical attention if thermal burn occurs.

Inhalation

If inhaled, remove to fresh air.

Ingestion

Get medical attention.

5. Fire-Fighting Measures

Suitable Extinguishing Media:

All extinguishing media are suitable.

Special Fire Fighting Procedures

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

Material Name: BUNA SE VP PBR 4022

Unusual Fire/Explosion Hazards

Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. The product decomposes exothermically with possibility of ignition.

6. Accidental release measures

Spill and Leak Procedures

Remove mechanically by a method that minimizes the generation of airborne dust (vacuum cleaner, wet mopping, etc.) Collect and place in appropriately marked sealable containers for disposal.

7. Handling and Storage

Storage Temperature: maximum:

40 °C (104 °F)

Storage Period 12 Months: from the date of production (manufacture)

Handling/Storage Precautions

Avoid inhalation and skin or eye contact with processing fumes. Use local exhaust ventilation above processing equipment. Wash thoroughly after handling. Keep container closed when not in use.

Further Info on Storage Conditions

Store in a cool dry place. Store in original or similar containers. Light may result in degradation of product.

8. Exposure Controls / Personal Protection

Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) PEL: 500 ppm, 2,000 mg/m3

Hexane (110-54-3)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 50 ppm

US. ACGIH Threshold Limit Values

Skin designation: Can be absorbed through the skin.

- US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
 - PEL: 500 ppm, 1,800 mg/m3

Industrial Hygiene/Ventilation Measures

Thermal processing operations should be ventilated to control gases and fumes given off during processing. Engineering controls should be sufficient to ensure airborne levels do not approach or exceed the exposure limit value for residuals.

Respiratory Protection

Although no exposure limit has been established for this product, the OSHA PEL for Particulates Not Otherwise Regulated (PNOR) of 15 mg/m3 - total dust, 5 mg/m3 - respirable fraction is recommended. In addition, the ACGIH recommends 3 mg/m3 - respirable particles and 10 mg/m3 - inhalable particles for Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS)., The following respirator is

Material Name: BUNA SE VP PBR 4022		Article Number: 56674857
	Page: 3 of 7 Re	eport Version: 1.0

recommended if airborne concentrations exceed the appropriate standard/guideline., NIOSH approved, airpurifying particulate respirator with N-95 filters.

Hand Protection

gloves

Eye Protection

safety glasses with side-shields.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product.

9. Physical and chemical properties

Form:	Solid
Appearance:	bales
Color:	Black
Odor:	Slight
pH:	Not Applicable
Melting Point:	Not Established
Boiling Point/Range:	Not Applicable
Flash Point:	$> 200 \degree C (> 392 \degree F)$ (Cleveland Open Cup (ASTM D-92))
Lower Explosion Limit:	Not Established
Upper Explosion Limit:	Not Established
Vapor Pressure:	Not Applicable
Specific Gravity:	0.95 - 0.97 @ 20 °C (68 °F)
Solubility in Water:	Insoluble
Solubility/Quantitative:	Aromatic hydrocarbons soluble
• -	Aliphatic hydrocarbons soluble
Autoignition Temperature:	> 200 °C (> 392 °F)
Decomposition Temperature:	> 200 °C (> 392 °F)
VOC Content:	Negligible
Viscosity, Dynamic:	not applicable

10. Stability and Reactivity

Hazardous Reactions

Hazardous polymerization does not occur. Exposure to high temperature causes exothermic reaction or decomposition.

Stability

Stable under normal conditions of use and storage.

Materials to avoid

oxidizing agents, Strong acids

Conditions to avoid

Avoid extreme heat. Do not expose to direct sunlight.

Hazardous decomposition products

By Fire and Thermal Decomposition: Carbon Monoxide; Carbon Dioxide; 1,3-Butadiene; Other undetermined compounds

Material Name: BUNA SE VP PBR 4022

Page: 4 of 7 Report Version: 1.0

11. Toxicological Information

<u>Toxicity Data for Styrene-Butadiene Copolymer</u> Eye Irritation rabbit, Draize, Mild eye irritation

12. Ecological Information

No information available.

13. Disposal considerations

Waste Disposal Method

Waste disposal should be in accordance with existing federal, state, provincial, and/or local environmental control laws.

Empty Container Precautions

Recondition or dispose of empty container in accordance with governmental regulations.

14. Transport information

Land transport (DOT) Non-Regulated

<u>Sea transport (IMDG)</u> Non-Regulated

<u>Air transport (ICAO/IATA)</u> Non-Regulated

15. Regulatory Information

United States Federal Regulations

OSHA Hazcom Standard Rating: Non-Hazardous

US. Toxic Substances Control Act: Listed on the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302): Components

<u>Compo</u> None

SARA Section 311/312 Hazard Categories:

Non-hazardous under Section 311/312

Material Name: BUNA SE VP PBR 4022

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): <u>Components</u>

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required: <u>Components</u> None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product, should be classified as a hazardous waste. (40 CFR 261.20-24)

State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

The concentrations reported below in units of parts per million (ppm) or parts per billion (ppb) are maximum values.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

<u>Weight %</u>	<u>Components</u>	CAS-No.
>=1%	Styrene-Butadiene Copolymer	9003-55-8
10 - 20%	Distillates, petroleum, hydrotreated	64742-52-5
	heavy naphthenic	
10 - 20%	Residues (petroleum), vacuum	64741-56-6
>=1%	Tall oil, disproportionated	68152-92-1

California Prop. 65:

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

16. Other Information

NFPA 704M Rating

Health	1
Flammability	1
Reactivity	0
Other	

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

HMIS Rating

Health	0
Flammability	1
Physical Hazard	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

* = Chronic Health Hazard

Material Name: BUNA SE VP PBR 4022

Page: 6 of 7 Report Version: 1.0

LANXESS Corporation's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS Corporation as a customer service.

Contact Person: Telephone: MSDS Number: Version Date: Report Version: Product Safety Department (800) LANXESS 00000009332 08/18/2009 1.0

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of LANXESS Corporation. The information in this MSDS relates only to the specific material designated herein. LANXESS Corporation assumes no legal responsibility for use of or reliance upon the information in this MSDS.