MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	**VECTOR® 4111N, 4113N, 4114N, 4211N and 4213N Styrenic Block Copolymers**
Version #	01
Issue date	28-March-2014
Revision date	-
Supersedes date	-
CAS #	Mixture
Product use	Industrial conversion as a raw material for manufacture of articles or goods.
Synonym(s)	VECTOR® is a registered trademark of TSRC Corporation
Manufacturer information	
Manufacturer	TSRC (Nantong) Industrial Ltd. No.22 TongWang Road, Nantong Economic and Technological Development Zone, Nantong, Jiangsu, P.R.China (PC: 226017)
Telephone	+86 513 8599 9966
E-mail	tpe.msds@tsrc-global.com
Emergency telephone	+1.760.476.3962
Access code	333558

2. Hazards Identification

Physical state	Solid.
Appearance	Pellets.
Emergency overview	Health injuries are not known or expected under normal use.
OSHA regulatory status	This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Inhalation. Ingestion. Eye contact. Skin contact.
Eyes	May cause irritation through mechanical abrasion.
Skin	Hot or molten material may produce thermal burns.
Inhalation	Dust may irritate the respiratory system.
Ingestion	Health injuries are not known or expected under normal use.
Signs and symptoms	Irritation of eyes and mucous membranes. Irritation of nose and throat.
Potential environmental effects	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.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Isoprene-Styrene Polymer	25038-32-8	>= 98

Composition comments All concentrations are in percent by weight.

4. First Aid Measures

First aid procedures	
Eye contact	Flush eyes with water as a precaution. Get medical attention if irritation develops or persists.
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.
Inhalation	If symptomatic, move to fresh air. Get medical attention if symptoms persist.
Ingestion	Have victim rinse mouth thoroughly with water.
Notes to physician	Treat symptomatically.

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

5. Fire Fighting Measures

Extinguishing media

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

Protection of firefighters

Specific hazards arising from the chemical	Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterized.
Protective equipment and precautions 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.
Fire fighting equipment/instructions	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.
General fire hazards	The product is not flammable. Will burn if involved in a fire.

6. Accidental Release Measures

Personal precautions	Avoid inhalation of fumes from molten product. Surfaces may become slippery after spillage. Wear appropriate personal protective equipment.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Methods for containment	Stop the flow of material, if this is without risk.
Methods for cleaning up	Scrape up with shovels into a suitable container for recycle or disposal.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	Avoid inhalation of dust and contact with skin and eyes. 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.
Storage	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.

8. Exposure Controls / Personal Protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Exposure guidelines	No exposure standards allocated.
Engineering controls	Observe occupational exposure limits and minimize the risk of inhalation of dust, mists and vapors. Use explosion-proof equipment if high dust/air concentrations are possible.

Personal protective equipment

Eye / face protection	If contact with material may occur, safety glasses and face shield are recommended.
Skin protection	When material is heated, wear gloves to protect against thermal burns. Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Pellets.
Physical state	Solid.
Form	Pellets.
Color	White to off-white.
Odor	Odorless to mild.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	Not applicable.

Vapor density	Not applicable.
Boiling point	Not applicable.
Melting point/Freezing point	Not available.
Solubility (water)	Insoluble.
Specific gravity	< 1
Flash point	Not applicable.
Flammability limits in air, upper, % by volume	Not applicable.
Flammability limits in air, lower, % by volume	Not applicable.
Auto-ignition temperature	Not available.
Evaporation rate	Not applicable.
Viscosity	Not applicable.
Other data	
Explosive properties	Not applicable.
Oxidizing properties	Not applicable.

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Temperatures above 230 °C
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Sensitization	Not classified.
Acute effects	Dusts may irritate the respiratory tract, skin and eyes.
Local effects	May cause eye and respiratory tract irritation.
Chronic effects	Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.
Carcinogenicity	Not classified.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive effects	Not classified.
Symptoms and target organs	Irritation of eyes and mucous membranes. Irritation of nose and throat.
Further information	No other specific acute or chronic health impact noted.

12. Ecological Information

Ecotoxicity	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.
Persistence and degradability	No data available.
Bioaccumulation / Accumulation	No data available.
Mobility in environmental media	The product is immiscible with water and will spread on water surfaces.

13. Disposal Considerations

Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

TDG

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)

Not controlled

Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status

Non-controlled

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

Mexico regulations

This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

16. Other Information

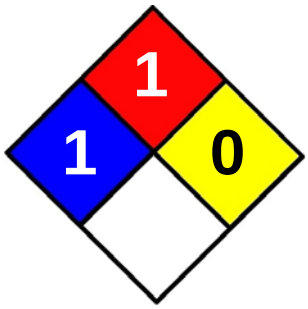
Recommended restrictions

-

Further information

HMIS® is a registered trade and service mark of the NPCA.

NFPA Ratings



Disclaimer

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