



Safety Data Sheet (SDS)

Revision / Review Date: 6/16/15

1. Chemical Product and Company Identification

Product Name:	BK-1675N
Distributed By:	HB Chemical 1665 Enterprise Parkway Twinsburg Oh 44087 Phone - 330-920-8023
SDS Prepared By (w Suppliers Input):	HB Chemical
Chemical Name / Family:	Isobutylene – Isoprene Copolymer/ Isobutylene-Isoprene Rubber (IR)
Technical Name:	Butyl Rubber, 2-methyl propene-1 polymer
Molecular Formula:	(C ₄ H ₈) _m (C ₄ H ₈) _n
Molecular Weight via GPC, Mn:	Not available
Product Use:	Synthetic Polymers, Tire and technical rubber industry
OSHA Status:	Non Hazardous
CAS No:	9010-85-9
REACH registration number:	Isobutylene: 01-2119456616-32-0014 Isoprene: 01-2119457891-29-0013

For emergency health, safety, and environmental information, calls 330-920-8023

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

2. Hazard(s) Identification

<u>Hazard description:</u>	The substance is nonhazardous, nontoxic. No adverse health effects at room temperature.
<u>Classification:</u>	This product is not hazardous as defined in Regulations 67/548/Ec, 1999/45/EC and resolutions (EC) n° 1272/2008 (CLP).
<u>Label Elements:</u>	Labelling according to the Regulation (EC) No1272/2008: not required, not listed.
<u>Information on special hazards for human organism and environment:</u>	Negative physical and chemical effects: none. Negative health effects and their symptoms: none.
<u>Negative effects for environment:</u>	No hazard for environment.
<u>Other hazards:</u>	Transforms in environment long-term effects under weather effects (atmospheric water, solar irradiation, cold, high temperatures).

<u>General:</u>	Low hazard material. Intoxication through entry into human body has not been defined and is unlikely. Handling of solid rubber is not a serious health hazard and does not require special first aid facilities. If in doubt, seek medical attention. Hot Butyl Rubber may cause thermal burns.
<u>Safety phrases:</u>	S61 – avoid entry into the environment
<u>Information source:</u>	ESIS – European Chemical Substances Information System (European Chemicals Bureau) Hazardous Substance Data Bank (HSDB) – U.S. National Library of Medicine, 2001-1.
<u>Warning:</u>	None.
<u>Signs and Symptoms of Exposure:</u>	Irritation, redness, burns.
<u>Primary Routes of Entry:</u>	Eyes, Skin and Inhalation.
<u>Medical Conditions Generally Aggravated by Exposure:</u>	None known.
<u>Eye Contact:</u>	For open systems where the contact is most probable the particulates may scratch eye surfaces / cause mechanical irritation.
<u>Skin Contact:</u>	Exposure to hot polymer may cause thermal burns, red skin, and pain.
<u>Ingestion:</u>	Ingress inside is unlikely. No hazard when swallowed.
<u>Inhalation:</u>	Rubber does not contain highly volatile fractions and there is no harmful pollutant emissions during storage.
<u>HMIS Hazard Ratings:</u>	Not available.
<u>HMIS limitation statement:</u>	The HMIS hazard ratings numbers are meant to give a quick indication of the relative hazards associated with the product. All of the information contained in the SDS should be consulted to assist with the safe handling of this material.
<u>Principal Hazardous Components:</u>	Not available.

3. Composition / Information on Ingredients

Chemical name / Synonyms	n°EC	n°REACH	n°Index	n°CAS	Content (%)	Classification according to Directive (EC) n° 1272/2008 (CLP)		Classification according to 67/548/EEC
						Hazard class / Hazard Category	Hazard Designations	
Polymer 2-methylbutadi-1,3-ene	None	Not subject to registration	None	9010-85-9	99,6	Not classified		
Stabilizer								
6.6'-di-tert-butyl-2.2'-methylene-di-r-cresol	204-327-1	Not subject to registration	none	119-47-1	<0,2	Not classified		
or Irganox 1010 Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)	229-722-6	Not subject to registration	none	6683-19-8	<0,2	Not classified		
or Wingstay L 4-methylphenol reaction products with dicyclopentadiene and isobutylene	271-867-2	Not subject to registration	none	68610-51-5	<0,2	Not classified		
Other admixtures								
Calcium Stearate	216-472-8	Not subject to registration	None	1592-23-0	<0,8	Not classified		

4. First Aid Measures

Inhalation:

No hazard at ambient temperature.

Eyes:

Wash with plenty of water to remove the product from eyes.

Skin:

No hazard at ambient temperature. Wash with water and soap. In case of contact with hot material, immediately wash with plenty of cold water. Apply a bandage of clean gauze or cotton cloth.

Ingestion:

No hazard. When small amount of rubber crumb is swallowed, first air is not normally required.

5. Fire-Fighting Measures

Suitable Extinguishing Media:

Dry chemical foam, fine sprayed water or mist, carbon dioxide, sand or earth could be used only in case of small fire. Fire-extinguishers of any type, water, water vapor, fire-extinguishing foams, inert gases, sand, asbestos cloth.

Prohibited fire- extinguishing means:

Prohibited fire extinguishing means are not established.

Special Fire Fighting Procedures:

Use a fire-resistant suit and a self-contained breathing apparatus. Remove personnel not participating in fire-fighting from the site of the fire.

Hazardous Combustion Products:

Carbon oxides and dioxides. Carbon dioxides (CAS No. 124-38-9) reduce oxygen (O₂) content in the air; they may have a toxic

effect on the cells causing the cell respiration disturbance.

Unusual fire and explosion hazards:

None known.

6. Accidental Release Measures

Steps to be taken in case material is spilled:

Use a fire-resistant suit and a self-contained breathing apparatus. Solid product in the form of bales. Collect the product and put it in the appropriate containers for disposal or reuse.

Environmental Disposal Information:

Contamination of water bodies and soil should be avoided.

Waste Disposal:

Reclaim or dispose of in accordance with local, state, and federal regulations.

7. Handling and Storage:

Empty Containers:

Not available.

Precautions to be taken in handling:

Protective measures. Arrangement of supply-and-exhaust ventilation system and local ventilation. Use of pressure tight equipment for production. Equipment grounding is mandatory. Use of personal protection equipment.

Storage:

The product is to be stored at the ambient temperature in the indoor area away from open fire sources, direct sunlight and atmospheric precipitations, away from heat sources. Rubber packed into polypropylene webbed bags is to be stored in stacks of 1.2 m high. Rubber packed into box-pallets is to be stored in stacks maximum 4 boxes in height.

Engineering controls:

Aerosols and dust formation preventive measures. Aerosols and dust do not occur at handling.

Environment protective measures:

Loss enhancement of rubber during transportation and storage, surface impoundment and discharge in sewerage to be excluded.

Precautionary measure against inflammation and explosion:

Open flame sources are not allowed

Packing materials:

- EVA-film a (shrink film);
- polyethylene film;
- plastic general-purpose container;
- wooden box pallet.

Requirements for storage rooms and containers:

The inside temperature should not exceed 30°C

<u>Other information on storage conditions:</u>	Storage together with oxidizers, acids and caustics is prohibited. Shelf life is maximum 1 year.
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8. Exposure Controls / Personal Protection

<u>Exposure limits:</u>	Due to physical and chemical properties and low toxicity there are no hygienic regulations for the air exposure limits.
<u>Exposure Controls:</u>	Ensuring that the content of harmful substances is within permissible concentration limits by using supply-and-exhaust ventilation system in the most contaminant air locations.
<u>Respiratory Protection:</u>	Not required under normal operating conditions. In case of emergency – use filter gas-mask, breathing masks.
<u>Ventilation:</u>	Use adequate ventilation.
<u>Hand Protection:</u>	Gloves made of cotton fabric.
<u>Eye Protection:</u>	Only in case of crushing of material in the open systems.
<u>Skin and Body Protection:</u>	Use protective clothing made of cotton fabric
<u>Other Precautions:</u>	Wash with soap and water before eating, drinking or using toilet facilities. Launder contaminated clothing before reuse.
<u>Decontamination Facilities:</u>	Eye bath, washing facilities (sinks / showers).
<u>Control of environmental impact:</u>	Concentration of pollutants should be measured in the process of thermal treatment.
<u>In everyday life:</u>	Not used in everyday life.

9. Physical and Chemical Properties

<u>Physical Form:</u>	Solid
<u>Appearance & Odor:</u>	White to amber color / Slight
<u>Specific Gravity:</u>	0.92
<u>Softening Point, R&B:</u>	Not available.
<u>Density:</u>	0.85 – 0.95 g/cm ³
<u>Solubility in Water:</u>	Insoluble at 20 °C
<u>Solubility in other solvents:</u>	Soluble in chloroform, tetra chloromethane, aliphatic and aromatic hydrocarbons.
<u>Flash Point, TAG CC F:</u>	187°C > 482
<u>Percent Volatiles (by weight):</u>	Not available.

<u>Evaporation Rate (Water ~ l):</u>	Not available.
<u>Vapor Pressure (mm Hg):</u>	Not available.
<u>Vapor Density (Air ~ l):</u>	Not available.
<u>Boiling Point (°F) Initial:</u>	Not available.
<u>Auto ignition Temperature, °C:</u>	402°C
<u>Flammable Limits, %(V):</u>	Not available.

10. Stability and Reactivity

<u>Stability:</u>	This product is stable under normal conditions.
<u>Incompatibility (Materials to Avoid):</u>	Strong oxidizers.
<u>Conditions to Avoid:</u>	Heating above the melting temperature (150°C).
<u>Hazardous Polymerization:</u>	Hazardous polymerization will not occur.
<u>Dangerous decomposition products:</u>	Carbon oxides, butadiene.

11. Toxicological Information

This material is not listed as a carcinogen or potential carcinogen by NTP, IARC, or OSHA.

<u>OSHA Permissible Exposure Limit:</u>	Not available.
<u>ACGIH Threshold Limit Value:</u>	Not available.
<u>Oral toxicity at single ingestion:</u>	Nontoxic.
<u>Skin toxicity at single exposure:</u>	Nontoxic.
<u>Toxicity at inhalation at single exposure:</u>	Nontoxic.
<u>Skin irritation:</u>	Causes no irritation.
<u>Eye irritation:</u>	Causes no irritation.
<u>Irritation of respiratory tract:</u>	Causes no irritation.
<u>Sensibilization:</u>	Absence.
<u>Toxicity at repeated dosage:</u>	Absence.
<u>Mutagenicity:</u>	Absence.
<u>Carcinogenicity:</u>	Not established.

12. Ecological Information

<u>Eco toxicity:</u>	Rubber bales do not pose a hazard for environment.
<u>Mobility:</u>	Solid product.
<u>Immunity and degradability:</u>	Transforms in the environment at long weather impact (atmospheric precipitation, solar radiation, cold, high temperatures).
<u>Bioaccumulation:</u>	Non-cumulative.
<u>Other negative effects:</u>	Not established.

13. Disposal Considerations

<u>Methods of disposal of wastes (remains):</u>	Solid wastes generated in the course of rubber processing are not toxic, they do not require neutralization and are subject to reprocessing. Non-treatable wastes are subject to incineration at the specialized landfill.
<u>Code of wastes:</u>	07 02 99 wastes from the MFSU of synthetic rubber (not otherwise specified) S61 – avoid entry into the environment.
<u>Methods of disposal of after-use package:</u>	Wooden packing is subject to incineration or is used as solid fuel after respective processing. Polymer packing is subject to subsequent reprocessing.

14. Transport Information

<u>D.O.T. Shipping Name:</u>	Not regulated.
<u>Air - ICAO (international Civil Aviation Organization):</u>	Not regulated.
<u>ADR/RID:</u>	Not classified.
<u>Sea - IMDG (International Maritime Dangerous Goods):</u>	Not classified.
<u>IATA:</u>	Not classified.
<u>Class:</u>	Not classified.
<u>Group of packing:</u>	None.
<u>Classification code:</u>	None.
<u>Hazard identification number:</u>	None.
<u>UNO number:</u>	Not classified.

15. Regulatory Information

All components of this material are on the TSCA Inventory.

All components of this material are on the Canadian DSL.

Marking (Resolution (EC) №1272/2008): Not classified.

Marking (67/548/EEC or 1999/45/EC): Not classified.

National legislative documents: Regulation (EC) 1907/2006 of the European Parliament and the Council of 18.12.2006 concerning registration, evaluation and authorization of chemicals (REACH), establishing the European Chemical Agency and adding the Regulation 1999/45/EC and cancelling the Resolution (EEC) 793/93 and the Resolution of Commission (EC) 1488/94 as well as the Directive of the Council 76/769/EEC and the Directives of Commission 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

16. Other Information

The above information has been compiled from what we believe to be credible sources. To our knowledge the information is accurate and reliable, however, it is not guaranteed. Any recommendations issued by HB Chemical personnel or literature is derived from experience and by no means should be taken as fact or construed as a recommendation to violate of any law, regulation or patent. It is the user's responsibility to determine the suitability of any HB supplied material in their application. The individual conditions of each customer are well outside of our control and we cannot be held liable for its functionality and use. Please contact our office should you need specific information beyond what is supplied above. As with all Chemical usage safety precautions beyond the stated are highly recommended.