

This Product Safety Summary document is a high-level summary intended to provide the general public with an overview of product safety information on this chemical substance. It is not intended to provide emergency response, medical or treatment information, or to provide a discussion of all safety and health information. This document is not intended to replace the (Material) Safety Data Sheet. Warnings and handling precautions provided below are not intended to replace or supersede manufacturers' instructions and warning for their consumer products which may contain this chemical substance.

1. Chemical Identity

Butyl Rubber Polymers are characterized as high-quality synthetic rubber polymers. The major components are isobutylene and isoprene.

CAS No.	Chemical Names:	Other Names
9010-85-9	IIR: Isobutylene-Isoprene Rubber	Exxon™ Butyl Rubber
68441-14-5	BB: brominated isobutylene-isoprene rubber BIIR	Exxon™ Bromobutyl
68081-82-3	CB: chlorinated isobutylene-isoprene rubber CIIR	Exxon™ Chlorobutyl
134737-24-9	Exxpro: brominated isobutylene-paramethylstyrene rubber (BIMSM)	Exxpro™ specialty elastomer

2. Product Uses

Butyl rubber is used in a variety of consumer applications including tires and medical tube stoppers.

3. Physical / Chemical Properties

Butyl Rubber Polymers are solid, stable polymers that are not hazardous and highly impermeable to air and water relative to other rubber polymers. If heated above the flash point, they may burn or decompose to flammable hydrocarbons (fire situations). Safety hazards at ambient temperature are generally negligible, due to its high molecular weight, minimal toxicity and general inertness. Butyl Rubber is not a combustible liquid, a compressed gas, an explosive, an organic peroxide, an oxidizer, or pyrophoric; nor is it unstable (reactive), water-reactive, or flammable. The flash point is estimated to be >482°F / 250°C.

4. Health Information

The health hazards of Butyl Rubber polymers at ambient temperature are generally negligible. They are not toxic, corrosive, sensitizers, reproductive toxins, or mutagenic, neurotoxic, or carcinogenic, and do not cause specific target organ effects. Additives and potential impurities have been identified and evaluated. The potential health hazards are negligible due to the low levels contained in the polymer. . Based on these evaluations, under U.S. Occupational Safety and Health Administration (OSHA) rules, European Union regulations and the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (UN GHS) these products are considered non-hazardous with regards to health effects.

5. Additional Hazard Information

When handling hot material, wear heat resistant gloves to protect your hands and skin. Immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.

6. Food Contact Regulated Uses

This product is not claimed as compliant for food contact uses.

7. Environmental Information

Butyl Rubber is a solid and does not degrade in the environment. It is not toxic or harmful to plants, animals, soil, or aquatic organisms. Butyl Rubber is not expected to be of environmental concern under normal handling and use. Should Butyl Rubber be spilled, it is a solid and is easily contained. It is not reactive and should be placed in suitable container for recycle or disposal.

8. Exposure Potential

- **Workplace exposure** – This refers to potential exposure to Butyl Rubber in a manufacturing facility. Generally, exposure of personnel in manufacturing facilities is negligible at ambient temperatures (< 100 °F). If processing requires potential emissions. Exposure to hot material can cause thermal burns. Exposure can also occur from inhalation to particulate dusts in the packaging material. The U.S. Occupational Safety and Health Administration (OSHA) exposure limits for nuisance dust are 5 mg/m³ (respirable dust) and 15 mg/m³ (total dust). The American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV) are 10 mg/m³ for inhalable particulates (total dust) and 3 mg/m³ for respirable particulates (total dust) for Particulates Not Otherwise Classified (PNOC).
- **Consumer use of products** - For the majority of the consumer, exposure is expected to be infrequent, of short duration and of no significant consequence.
- **Environmentally releases** – As a chemical manufacturer, we are committed to operating in an environmentally responsible manner everywhere we do business. Our efforts are guided by in-depth scientific understanding of the environmental impact of our operations, as well as by the social and economic needs of the communities in which we operate. Industrial spills or releases are rare; however a spill may pose a significant flammability issue. Our operational improvement targets and plans are based on driving incidents with real environmental impact to zero and delivering superior environmental performance.

9. Manufacture of Product

- **Process** – Produced by the catalytic polymerization of isobutylene and isoprene

10. Risk Management

- **Workplace Risk Management** – When using this substance or products which contain this substance, make sure that there is adequate ventilation. Always use appropriate chemical resistant gloves to protect your hands and skin and always wear eye protection such as chemical goggles. Do not eat, drink, or smoke where this substance is handled, processed, or stored. Wash hands and skin following contact. If this substance gets into your eyes, rinse eyes thoroughly for at least 15 minutes with tap water and seek medical attention. Please refer to the (Material) Safety Data Sheet.
- **Consumer Risk Management** - This chemical is not sold directly to the public for general consumer uses. If exposure should occur, it is expected to be infrequent and of short duration. Always follow manufacturers' instructions, warnings and handling precautions when using their products. The best way to minimize exposure to vapors is to work in well-ventilated areas.

11. Regulatory Information

Regulations may exist that govern the manufacture, sale, transportation, use and/or disposal of this product and may vary by city, state, country or geographic region. Additional helpful information may be found by consulting the relevant ExxonMobil (Material) Safety Data Sheet at:

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<http://www.msds.exxonmobil.com>

13. Conclusion Statement

Butyl Rubber ...

- is a widely used polymer.
- is considered a non-hazardous product.
- does not cause adverse health or environmental effects at levels typically found in the workplace or environment.
- is non-flammable but it can burn; use with good ventilation.

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