

# SAFETY DATA SHEET

## Blended Bromobutyl

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Printed: 02/28/2019

Revision: 02/28/2019

Supersedes Revision: 07/15/2016

### 1. Product and Company Identification

**Product Name:** Blended Bromobutyl  
**Trade Name:** Brominated isobutylene  
**Company Name:** Goldsmith & Eggleton  
Ravago Manufacturing Americas  
1900 Summit Tower Blvd., Suite 900  
Orlando, FL 32810  
**Web site address:** www.ravagomfg.com  
**Email address:** sds-rma@ravagoamericas.com  
**Emergency Contact:** ChemTrec: (800) 424-9300  
**Information:** (330) 336-6616

### 2. Hazards Identification

**GHS Signal Word:** **None**  
**GHS Hazard Phrases:** No phrases apply.  
**GHS Precautionary Phrases:** No phrases apply.  
**GHS Response Phrases:** No phrases apply.  
**GHS Storage and Disposal Phrases:** No phrases apply.  
**OSHA Regulatory Status:** This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200, the SDS and labels contain all the information as required by the standard.  
**Potential Health Effects (Acute and Chronic):** The components of this product are embedded in an impervious polymer matrix and therefore present a negligible exposure risk under normal conditions of processing and handling.  
**Inhalation:** Fumes produced during melt process may cause eye, skin and respiratory irritation.  
**Skin Contact:** Heated material can cause thermal burns resulting in pain, redness and blistering.  
**Eye Contact:** May cause eye irritation.  
**Ingestion:** May be harmful if swallowed.  
**Medical Conditions Generally Aggravated By Exposure:** None known.

### 3. Composition/Information on Ingredients

CAS #	Components (Chemical Name)	Concentration
68441-14-5	1,3-Butadiene, 2-methyl-, polymer with 2-methyl-1-propene, brominated	~100.0 %

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### 4. First Aid Measures

<b>Emergency and First Aid Procedures:</b>	For processing fume inhalation, leave the contaminated area and breathe fresh air.
<b>In Case of Inhalation:</b>	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
<b>In Case of Skin Contact:</b>	Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.
<b>In Case of Eye Contact:</b>	In case of contact, immediately flush eyes with copious amounts of water for at least {15} minutes.
<b>In Case of Ingestion:</b>	If swallowed, wash out mouth with water provided person is conscious. Call a physician.
<b>Signs and Symptoms Of Exposure:</b>	The components of this product are embedded in an impervious polymer matrix and therefore present a negligible exposure risk under normal processing conditions.
<b>Note to Physician:</b>	None

### 5. Fire Fighting Measures

<b>Flash Pt:</b>	NA Method Used: Not Applicable
<b>Explosive Limits:</b>	LEL: NA UEL: NA
<b>Autoignition Pt:</b>	NA
<b>Suitable Extinguishing Media:</b>	Water spray and foam. Water is the best extinguishing medium.
<b>Fire Fighting Instructions:</b>	Emits toxic fumes under fire conditions. Approved positive pressure demand breathing apparatus (SCBA) and protective clothing should be used for all fires.
<b>Flammable Properties and Hazards:</b>	Carbon dioxide and carbon monoxide generated when the material burns.
<b>Hazardous Combustion Products:</b>	No data available.

### 6. Accidental Release Measures

<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	Vacuum or sweep up material and place into a suitable disposal container.
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### 7. Handling and Storage

<b>Precautions To Be Taken in Handling:</b>	Use with adequate ventilation.
<b>Precautions To Be Taken in Storing:</b>	Store in a cool, dry place.

### 8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
68441-14-5	1,3-Butadiene, 2-methyl-, polymer with 2-methyl-1-propene, brominated	No data.	No data.	No data.

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<b>Respiratory Equipment (Specify Type):</b>	Follow the OSHA respirator regulations found in {149} CFR {1910.134} or European Standard EN {149}. Use a NIOSH/MSHA or European Standard EN {149} approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
<b>Eye Protection:</b>	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in {1910.133} CFR {1910.133} or European Standard EN166.
<b>Protective Gloves:</b>	Wear appropriate protective gloves to minimize skin exposure.
<b>Other Protective Clothing:</b>	Wear appropriate protective clothing to minimize contact with skin.
<b>Engineering Controls (Ventilation etc.):</b>	Use adequate ventilation to keep airborne concentrations low. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.
<b>Work/Hygienic/Maintenance Practices:</b>	Wash thoroughly after handling.

## 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas [ ] Liquid [X] Solid
<b>Appearance and Odor:</b>	White to yellow bundle with slight or no odor.
<b>pH:</b>	No data.
<b>Melting Point:</b>	NA
<b>Boiling Point:</b>	NA
<b>Flash Pt:</b>	NA Method Used: Not Applicable
<b>Evaporation Rate:</b>	NA
<b>Flammability (solid, gas):</b>	No data available.
<b>Explosive Limits:</b>	LEL: NA UEL: NA
<b>Vapor Pressure (vs. Air or mm Hg):</b>	NA
<b>Vapor Density (vs. Air = 1):</b>	NA
<b>Specific Gravity (Water = 1):</b>	< 1
<b>Solubility in Water:</b>	NA
<b>Solubility Notes:</b>	Insoluble in cold water.
<b>Octanol/Water Partition Coefficient:</b>	No data.
<b>Percent Volatile:</b>	< 1.0 %
<b>Autoignition Pt:</b>	NA
<b>Decomposition Temperature:</b>	> 300.00 C (572.0 F)
<b>Viscosity:</b>	No data.

## 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ ] Stable [X]
<b>Conditions To Avoid - Instability:</b>	Stable under recommended conditions of storage and handling.
<b>Incompatibility - Materials To Avoid:</b>	No special recommendations.
<b>Hazardous Decomposition or Byproducts:</b>	Processing fumes evolved at recommended processing conditions may include trace levels of low molecular weight hydrocarbon fragments, carbon dioxide, carbon monoxide and Irritating fumes and gases which may contain hydrogen bromide.
<b>Possibility of Hazardous Reactions:</b>	Will occur [ ] Will not occur [X]
<b>Conditions To Avoid - Hazardous Reactions:</b>	Under normal conditions of use, hazardous decomposition will not occur.

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### 11. Toxicological Information

**Toxicological Information:** No data available.

**Carcinogenicity/Other Information:**

CAS #	Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
68441-14-5	1,3-Butadiene, 2-methyl-, polymer with 2-methyl-1-propene, brominated	n.a.	n.a.	n.a.	n.a.

### 12. Ecological Information

**General Ecological Information:** This 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.

**Bioaccumulative Potential:** This product will not readily bioaccumulate due to its insolubility in water.

**Mobility in Soil:** Soil mobility is expected to be negligible, because the product is insoluble in water.

### 13. Disposal Considerations

**Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in {261} CFR Parts {261.3}. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  
RCRA P-Series: None listed.  
RCRA U-Series: None listed.

### 14. Transport Information

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** Not regulated as a hazardous material.

**DOT Hazard Class:**

**UN/NA Number:**

**AIR TRANSPORT (ICAO/IATA):**

**ICAO/IATA Shipping Name:** Non-Hazardous for Air Transport.

### 15. Regulatory Information

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

CAS #	Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
68441-14-5	1,3-Butadiene, 2-methyl-, polymer with 2-methyl-1-propene, brominated	No	No	No

**This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:**

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Explosive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Acute toxicity (any route of exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Flammable (gases, aerosols, liquid, or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Skin Corrosion or Irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Oxidizer (liquid, solid or gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Serious eye damage or eye irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Self-reactive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Respiratory or Skin Sensitization
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pyrophoric (liquid or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Germ cell mutagenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pyrophoric gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Carcinogenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Self-heating	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reproductive toxicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Organic peroxide	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specific target organ toxicity (single or repeated exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Corrosive to metal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Aspiration Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Gas under pressure (compressed gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Simple Asphyxiant
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No In contact with water emits flammable gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Health) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Combustible Dust	

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[ ] Yes [X] No (Physical) Hazard Not Otherwise Classified (HNOC)

CAS #	Components (Chemical Name)	Other US EPA or State Lists
68441-14-5	1,3-Butadiene, 2-methyl-, polymer with 2-methyl-1-propene, brominated	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory
CAS #	Components (Chemical Name)	International Regulatory Lists
68441-14-5	1,3-Butadiene, 2-methyl-, polymer with 2-methyl-1-propene, brominated	Canadian DSL: Yes; Canadian NDSL: No; Mexico INSQ: No; REACH: Yes - (P)

### 16. Other Information

**Revision Date:** 02/28/2019**Preparer Name:** Safety & Environmental Department

**Additional Information About This Product:** Information given herein is offered in good faith as accurate, but without guarantee. The conditions of use and suitability of the product for an application is beyond our control. All risks of use of the product are therefore assumed by the user and we expressly disclaim all warranties of every kind of nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of this product. Appropriate warnings and safe handling procedures should be provided to handlers and users.