

# SAFETY DATA SHEET



REVISION NUMBER: 0  
DATE OF PRINTING: 01/02/2014  
PREPARED BY: S. M. CARDELLA

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURED BY:  
**JOHN C. DOLPH, a Von Roll Company**  
P.O. BOX 267 MONMOUTH JUNCTION, NJ 08852  
BUSINESS: (732) 329-2333  
EMERGENCY: (518) 395-3310

PRODUCT ID: **CB-1130EF**

CHEMICAL FAMILY: INSULATING VARNISH

CHEMICAL NAME: POLYBUTADIENE RESIN

FORMULA: MIXTURE

SYNONYMS: NONE

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS PRODUCT COMPOSITION/CAS NUMBER	APPROX. WEIGHT PERCENT	ACGIH 8 HR. TWA	ACGIH UNIT	OSHA PEL-TWA	OSHA UNIT
Carbon Black 1333-86-4	1 - 5	3.5	MG/m <sup>3</sup>	3.5	MG/m <sup>3</sup>
Aluminum Oxide 1344-28-1	0.1 - 1	PARTICULATES: 10	MG/m <sup>3</sup>	PARTICULATES: 15	MG/m <sup>3</sup>
1,3-Butadiene Polymer, Hydroxy-terminated 69102-90-5	30 - 60	NA	PPM	NA	PPM
Decabromodiphenyl Ethane 84852-53-9	30 - 60	NA	PPM	NA	PPM

## 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** Refer to other MSDS sections for detailed information.

**TARGET ORGANS:** Respiratory System. Kidneys. Liver. Skin. Central Nervous System. Gastrointestinal System. Hematopoietic System (Blood). Eyes.

**EFFECTS FROM ACUTE EXPOSURE:**

**INGESTION:** Causes vomiting, nausea, and diarrhea. May cause severe damage of gastrointestinal tract. Aspiration can be a hazard if this material is swallowed. May cause pulmonary edema.

**SKIN CONTACT:** Causes moderate skin irritation. May cause skin defatting with prolonged exposure. Can dry skin.

**INHALATION:** Excessive inhalation causes headache, dizziness, nausea and incoordination. Causes irritation of the mouth, nose, and throat. Can cause unconsciousness if inhaled. May cause allergic respiratory reaction.

**EYE CONTACT:** Causes eye irritation. Causes redness and tearing. Causes blurred vision.

**AGGRAVATED MEDICAL CONDITIONS:** Respiratory. Pulmonary disorders. Liver, kidney. Dermal ailments. Central nervous system disorders. Gastrointestinal disorders. Blood disorders. Eye ailments.

**EFFECTS OF CHRONIC EXPOSURE:** Dermatitis. Central nervous system damage. Blood disorders. Liver and kidney damage. Respiratory ailments. Corneal damage. Reproductive disorders. Eye damage.

**CARCINOGENICITY COMMENT:** This product or one of its ingredients present at 0.1% or more is listed as a carcinogen or potential carcinogen by NTP, IARC or OSHA.

**CARCINOGENICITY: Carbon Black:** In powder form carbon black has been declared a Group 2B carcinogen, possibly carcinogenic to humans, by IARC. Several inhalation studies in female rats have shown increases in benign and malignant lung tumors. The totality of epidemiological studies both in the carbon black production industry and the user industries suggest that there is inadequate evidence for the carcinogenicity in humans of carbon black. When encapsulated in resin it is not expected to cause harm.

**Titanium Dioxide:** IARC has declared titanium dioxide to be a Category 2B. It is considered to be a possible human carcinogen.

**Antimony oxide:** The International Agency for Research on Cancer (IARC) has determined that antimony oxide is a positive animal and a possible human carcinogen. At antimony oxide concentrations of 4.2 and 50 mg/m<sup>3</sup> benign and malignant lung tumors have been seen in rats. No lung tumors were reported in rats exposed to 1.6 mg/m<sup>3</sup>.

**1,3-Butadiene:** OSHA and IARC rating of 1. NTP rating of 2.

**ROUTES OF ENTRY:** Ingestion. Dermal - skin. Eyes. Inhalation. Absorption.

**OTHER:** None known.

#### 4. FIRST AID MEASURES

**INGESTION:** Do not induce vomiting. Slowly dilute with 1-3 glasses of water and seek medical attention. Never give anything by mouth to an unconscious person.

**SKIN CONTACT:** Remove contaminated clothing and launder before reuse. Wash with soap and water. Get medical attention if irritation persists.

**INHALATION:** If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

**EYE CONTACT:** In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

**NOTES TO PHYSICIAN:** Monitor for 24 hrs., observe and support liver function. Aspiration may cause severe lung damage. Evacuate stomach in a way which avoids aspiration.

#### 5. FIRE FIGHTING MEASURES

**FLASH POINT (F):** >200 (C): >93

**FLASH POINT METHOD:** Not specified

**IGNITION TEMP (F):** Unknown (C): Unknown

**OSHA FLAMMABILITY CLASSIFICATION:** Combustible Liquid, Class IIIB

**FLAMMABLE LIMITS IN AIR - LOWER (%):** Not Determined

**FLAMMABLE LIMITS IN AIR - UPPER (%):** Not Determined

**SENSITIVITY TO MECHANICAL IMPACT (Y/N):** No

**SENSITIVITY TO STATIC DISCHARGE:** Sensitivity to static discharge is not expected.

**EXTINGUISHING MEDIA:** Carbon dioxide. Dry chemical. Foam. Water mist.

**FIRE FIGHTING PROCEDURES:** Vapors may form explosive mixture with air. Flammable. Positive pressure, self-contained breathing apparatus. Evacuate area and fight fire from a safe distance.

#### 6. ACCIDENTAL RELEASE MEASURES

**ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section. Remove sources of ignition. Warn other workers of spill. Increase area ventilation. Persons not trained should evacuate area.

## 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Use only in a well ventilated area. Warning: Flammable. Do not inhale vapors. Keep away from food and smoking materials. Wash hands before eating and smoking. Use only spark-proof and explosion-proof tools and equipment. Avoid contact with eyes. Use ground strap and appropriate precautions for dispensing flammable liquids. Keep container closed when not in use. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Open container cautiously.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Von Roll recommends evaluation and selection of appropriate engineering controls (such as ventilation and eyewash/safety shower) as well as appropriate personal protective equipment (such as respiratory protection, protective gloves, eye protection) for safely handling this material. The following guidelines should be considered in this process.

**ENGINEERING CONTROLS:** Exhaust ventilation. Showers. Eyewash stations. Use in a well ventilated area.

**RESPIRATORY PROTECTION:** Use in a well ventilated area. Use approved NIOSH respiratory protection if TLV exceeded, or over exposure is likely. Cartridge respirator.

**GLOVES:** Neoprene gloves.

**EYE PROTECTION:** Safety glasses with side shields (designed to ANSI standards). Goggles may be required based on application and processing of material. Splash Goggles.

**OTHER PERSONAL PROTECTION DATA:** Rubber apron or other chemical-resistant apron.

**VENTILATION:** Use only in well ventilated area. Localized mechanical ventilation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### COMPONENT INFORMATION:

HAZARDOUS PRODUCT COMPOSITION/CAS NUMBER	APPROX. WEIGHT PERCENT	BOILING POINT (F):	BOILING POINT (C):	VAPOR PRESSURE @ 20 C (mmHg):	VAPOR DENSITY (AIR=1):
1,3-Butadiene Polymer, Hydroxy-terminated 69102-90-5	30 - 60	>572	>300	NOT DETERMINED	NOT DETERMINED
Decabromodiphenyl Ethane 84852-53-9	30 - 60	NOT DETERMINED	NOT DETERMINED	NOT DETERMINED	NOT DETERMINED
Unknown Polybutadiene Polymer UNK00300	1 - 5	NOT DETERMINED	NOT DETERMINED	NOT DETERMINED	NOT DETERMINED
Carbon Black 1333-86-4	1 - 5	NOT DETERMINED	NOT DETERMINED	NOT DETERMINED	NOT DETERMINED
Antimony Oxide 1309-64-4	<0.1	2822	1550	NOT DETERMINED	NOT DETERMINED
Lead 7439-92-1	<5 PPM	3164	1740	NOT DETERMINED	NOT DETERMINED
Arsenic 7440-38-2	<5 PPM	Sublim. @ 1134	Sublim. @ 612	NOT DETERMINED	NOT DETERMINED
1,3-Butadiene 106-99-0	<5 PPM	24	-4.5	910	1.865

### PRODUCT INFORMATION:

BOILING POINT (F): NOT DETERMINED (C): NOT DETERMINED

FREEZING POINT (F): NOT DETERMINED (C): NOT DETERMINED

MELTING POINT (F): NOT DETERMINED (C): NOT DETERMINED

PHYSICAL STATE: LIQUID

DESCRIPTION: BLACK

ODOR: AROMATIC HYDROCARBON

ODOR THRESHOLD (PPM): UNKNOWN

% VOLATILE BY WEIGHT: <2.0

EVAPORATION RATE (BUTYL ACETATE = 1): <1

VAPOR PRESSURE (mmHg @ 20 C): NOT DETERMINED

VAPOR DENSITY (AIR=1):

NOT DETERMINED

SPECIFIC GRAVITY @ 25 C (WATER = 1): 1.30

ACID/ALKALINITY (MEG/G): NOT DETERMINED

pH: NOT DETERMINED

SOLUBILITY IN WATER DESCRIPTION: MODERATE

SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT): NOT DETERMINED

## 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Carbon dioxide. Toxic fumes. Toxic metal fumes. Fumes of aromatic hydrocarbons. Butadiene

MATERIALS TO AVOID: Avoid contact with acidic, basic or oxidizing agents. Metal salts such as aluminum chloride.

CONDITIONS TO AVOID: Keep away from heat, sparks and flame.

## 11. TOXICOLOGICAL INFORMATION

### COMPONENT INFORMATION:

#### ACUTE ORAL LD50 (MG/KG):

1,3-Butadiene Polymer, Hydroxy-terminated 69102-90-5	NOT DETERMINED
Decabromodiphenyl Ethane 84852-53-9	NOT DETERMINED
Unknown Polybutadiene Polymer UNK00300	NOT DETERMINED
Carbon Black 1333-86-4	>15,400 (RAT)
Antimony Oxide 1309-64-4	>20,000 (RAT)
Lead 7439-92-1	LDLO: 160 (PIGEON)
Arsenic 7440-38-2	763 (RAT)
1,3-Butadiene 106-99-0	5,480 (RAT)

#### ACUTE DERMAL LD50 (MG/KG):

1,3-Butadiene Polymer, Hydroxy-terminated 69102-90-5	NOT DETERMINED
Decabromodiphenyl Ethane 84852-53-9	NOT DETERMINED
Unknown Polybutadiene Polymer UNK00300	NOT DETERMINED
Carbon Black 1333-86-4	>3,000 (RABBIT)

Antimony Oxide 1309-64-4	>2,000 (RABBIT)
Lead 7439-92-1	NOT DETERMINED
Arsenic 7440-38-2	NOT DETERMINED
1,3-Butadiene 106-99-0	NOT DETERMINED

#### ACUTE INHALATION:

1,3-Butadiene Polymer, Hydroxy-terminated 69102-90-5	NOT DETERMINED
Decabromodiphenyl Ethane 84852-53-9	NOT DETERMINED
Unknown Polybutadiene Polymer UNK00300	NOT DETERMINED
Carbon Black 1333-86-4	NOT DETERMINED
Antimony Oxide 1309-64-4	NOT DETERMINED
Lead 7439-92-1	NOT DETERMINED
Arsenic 7440-38-2	NOT DETERMINED
1,3-Butadiene 106-99-0	LC50: 0.3 MG / M3 / 4H (RAT)

#### OTHER:

1,3-Butadiene Polymer, Hydroxy-terminated 69102-90-5	NOT DETERMINED
Decabromodiphenyl Ethane 84852-53-9	NOT DETERMINED
Unknown Polybutadiene Polymer UNK00300	NOT DETERMINED
Carbon Black 1333-86-4	NONE
Antimony Oxide 1309-64-4	Eye and skin irritant.
Lead 7439-92-1	NONE
Arsenic 7440-38-2	NONE
1,3-Butadiene 106-99-0	NONE

## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** No data at this time.

**CHEMICAL FATE INFORMATION:** No data at this time.

**PERSISTENCE:** Not determined.

**APPRAISAL:** Not determined.

**MOBILITY:** Not determined.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL OF WASTE METHOD:** Disposal should be made in accordance with federal, state and local regulations.

**EPA HAZARDOUS WASTE DISPOSAL CODE:** Not regulated.

## 14. TRANSPORT INFORMATION

**DOT SHIPPING NAME:** RESIN COMPOUND, LIQUID, NOT DOT REGULATED

**DOT HAZARD CLASS:** NOT DOT REGULATED.

**DOT PACKING GROUP:** NOT DOT REGULATED.

**DOT LABEL(S):** NOT DOT REGULATED.  
**UN/NA NUMBER:** NOT DOT REGULATED.  
**PLACARDS:** NOT DOT REGULATED.  
**ICAO/IATA:** NOT REGULATED  
**MARINE POLLUTANT:** NONE  
**NMFC CLASSIFICATION:** CLASS 55

**15. REGULATORY INFORMATION**

**HAZARD RATING SYSTEMS**

**NFPA RATING:** HEALTH 1 , FLAMMABILITY 1 , INSTABILITY 1  
**HMIS CLASSIFICATION:** HEALTH \*1 , FLAMMABILITY 1 , PHYSICAL HAZARD 1  
**VOC EXCLUDING H2O**  
**& EXEMPTED VOC (LB/GL):** NOT DETERMINED

**COUNTRY REGISTRATION**

**TSCA INVENTORY STATUS:** All components are NOT listed on TSCA Inventory.  
**CANADIAN INVENTORY:** This product does NOT comply with the Canadian DSL.  
**EINECS:** This product does not comply with EINECS  
**REGULATORY INFORMATION: CA/MA/NJ/PA RIGHT-TO-KNOW**

HAZARDOUS PRODUCT COMPOSITION/CAS NUMBER	APPROX. WEIGHT PERCENT	CALIFORNIA PROPOSITION 65	MASSACHUSETTS RIGHT-TO-KNOW	NEW JERSEY RIGHT-TO-KNOW	PENNSYLVANIA RIGHT-TO-KNOW
1,3-Butadiene Polymer, Hydroxy-terminated 69102-90-5	30 - 60	NOT LISTED	NOT LISTED	NOT LISTED	NOT LISTED
Decabromodiphenyl Ethane 84852-53-9	30 - 60				
Unknown Polybutadiene Polymer UNK00300	1 - 5	NOT LISTED	NOT LISTED	NOT LISTED	NOT LISTED
Carbon Black 1333-86-4	1 - 5	YES	YES	YES	YES
Antimony Oxide 1309-64-4	<0.1	YES	YES	YES	YES
Lead 7439-92-1	<5 PPM	YES	YES	YES	YES
Arsenic 7440-38-2	<5 PPM	YES	YES	YES	YES
1,3-Butadiene 106-99-0	<5 PPM	YES	YES	YES	YES

**SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST:** No components of this product are listed as extremely hazardous substances in 40 CFR Part 355 and are present at levels which could require reporting and emergency planning.

**SARA (311, 312) HAZARD CLASS:** ACUTE HEALTH HAZARD  
 CHRONIC HEALTH HAZARD  
 FIRE HAZARD

**SARA 313 CHEMICALS:** LEAD AND LEAD COMPOUNDS // 7439-92-1  
 ANTIMONY AND ANTIMONY COMPOUNDS // 7440-36-0

**WHMIS (CANADA):**

**WHMIS HAZARD CLASS:**
D1B TOXIC MATERIALS  
D2A VERY TOXIC MATERIALS  
D2B TOXIC MATERIALS

**16. OTHER INFORMATION****COMPANY DISCLAIMER:**

These data are offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is made. The recommended handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use.

**ABBREVIATIONS:**

EST = ESTIMATED  
NA = NOT APPLICABLE

NEGL. = NEGLIGIBLE  
UNKN = UNKNOWN

**ADDITIONAL INFORMATION:**

NONE