

ERGON ARMOR

Liquid Isobutylene

MSDS No. EA072

Date of Preparation: February 2, 2010

Revision No. 0

Section 1 – Chemical Product and Company Information

Product/Chemical Name:	Liquid Isobutylene
Chemical Formula:	Mixture
CAS Number:	Mixture
Other Designations:	NA
General Use:	Adhesives Additive
Manufacturer:	Ergon Armor; P O Box 1639; Jackson MS 39215-1639; Phone 601-933-3000; Hours of Operation 8:00 am – 5:00 pm; ERGON 24 Hour Emergency Phone Number 1-800-222-7122; CHEMTREC 1-800-424-9300.

Section 2 – Composition / Information on Ingredients

Ingredient Name	CAS Number	% Volume
Petroleum Resin Plasticizer	Mixture	85-95%
Isobutylene Copolymer	TSCA Listed	5-15%
Carbon Black	1333-86-4	1-2%

INGREDIENT	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDHL
	TWA	STEL	TWA	STEL	TWA	STEL	
Petroleum Resin Plasticizer	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Isobutylene Copolymer	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Carbon Black	3.5 mg/m ³	None estab.	3.5 mg/m ³	None estab.	None estab.	None estab.	None estab.

Section 3 – Hazards Information

EMERGENCY OVERVIEW

HMIS
H-1
F-1
R-0
PPE*
* Sec.8

POTENTIAL HEALTH EFFECTS

Primary Entry Routes: Inhalation if product is aerosolized and absorption.

Target Organs: Mucous membranes, skin, and digestive tract.

Acute Effects

Inhalation: Irritating to mucous membranes and respiratory tract.

Eye: May cause irritation.

Skin: May cause irritation.

Ingestion: Irritating to mucous membranes and gastrointestinal tract.

Carcinogenicity: IARC, NTP, and OSHA do not list this product as carcinogen.

Medical Conditions Aggravated by Long-Term Exposure: May cause skin, eye and mucous membrane irritation.

Chronic Effects: Prolonged and repeated skin contact may cause dermatitis.

Section 4 – First Aid Measures

Inhalation: Remove victim to fresh air. Seek medical attention if needed.

Eye Contact: Flush thoroughly with water for at least 15 minutes. If irritation persists seek medical attention.

Skin Contact: Wash area with soap and water. Seek medical attention if needed.

Ingestion: Do not induce vomiting and seek medical help.

Special Precautions/Procedures:

Provide adequate ventilation to keep vapors below allowable exposure levels. Use PPE appropriate for the task.

Section 5 – Fire Fighting Measures

Flash Point: >350 °F

Flash Point Method: COC

Auto Ignition Temperature: No Data

LEL: No Data

UEL: No Data

Flammability Classification: Class IIIB

Extinguishing Media: Dry chemical, water spray, foam and carbon dioxide.

Unusual Fire or Explosion Hazards: Frothing may occur if water is sprayed into container of burning liquid. Vapors are heavier than air and may travel along the ground to an ignition source distant from the material handling point.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, and sulfur dioxide.

Fire-Fighting Instructions: Do not enter confined fire space without proper protective equipment, including a NIOSH approved SCBA. Use water spray to cool fire-exposed surfaces and to protect personnel.

Fire-Fighting Equipment: Use self-contained breathing apparatus in enclosed areas where heavy smoke may occur.



Section 6 – Accidental Release Matters

Spill/Leak Procedures: Stop spill at source. Confine spill by diking or impoundment. Remove sources of heat or ignition. Clean-up spill but do not flush to sewer or surface water. Ventilate area and avoid breathing vapors or mists.

Small Spills: Stop spill at source if possible. Isolate and confine by diking, or similar method. Remove discharged material.

Large Spills:

Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Cleanup: Allow material to cool. Mix with inert absorbent material such as soil, sand, or oil dry, to stabilize.

Regulatory Requirements: Notify local health and pollution control agencies as appropriate. Follow applicable OSHA regulations (29 CFR 1900.120). This material is not a hazardous waste as defined in RCRA. For disposal follow all federal, state, and local regulations regarding solid waste.

Section 7 – Handling and Storage

Handling Precautions: Wash with soap and water before eating, drinking, or smoking after handling product. Launder contaminated clothing before reuse.

Storage Requirements: Ground and bond all transfer and storage equipment. Ventilation is required only in enclosed areas where the emulsion is subjected to severe conditions of heat or agitation.

Regulatory Requirements: None known.

Section 8 – Exposure Controls / Personal Protection

Engineering Controls: Keep containers closed when not in use. Do not store near heat, sparks, flame, or strong oxidants.

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA

respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH -approved respirator. Select respirator based on its suitability, to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. **Use self-contained, positive-pressure, breathing apparatus (SCBA) when this product is used in a confined or enclosed space and exposure limits are exceeded or hydrogen sulfide concentration is unknown or exceeds 20 ppm.** Organic vapor respirators may be used with good ventilation when organic vapors are less than 1000 ppm or ten times permissible exposure limit, whichever is less. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA until it is determined that a hazardous atmosphere and/or oxygen deficient atmosphere is NOT PRESENT. **Warning! air-purifying respirators do not protect workers in oxygen-deficient atmospheres.** If respirators are used, OSHA requires a written respiratory protection program that includes: procedures for selecting respirators; medical evaluation; fit testing; use in routine and emergency situations; cleaning, disinfecting, storing, inspecting, repairing, discarding and maintaining respirators; adequate air quality, quantity and flow; training in respiratory hazards; training in use of respirators; and an evaluation of the effectiveness of the respiratory program.

Protective Clothing/Equipment: Wear protective gloves, boots, aprons, and gauntlets as need to prevent prolonged or repeated skin contact. Goggles and face shields should be used in areas where splashing may occur. Wear protective eyeglasses or safety goggles per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, or smoking.

Section 9 – Physical and Chemical Properties

Physical State: Viscous Liquid

Appearance and Odor: Black liquid with faint petroleum odor

Odor Threshold: No data

Vapor Pressure: No data

Vapor Density (Air = 1): No data

Formula Weight: Varies

Density: 8.0 lb/gal

Specific Gravity (H₂O = 1, at 4°C): 0.96

pH: NA

Water Solubility: Negligible

Other Solubilities: No data.

Boiling Point: >600°F

Freezing/Melting Point: No data

Viscosity: No data

Refractive Index: No data.

Surface Tension: No data.

% Volatile: 0

Evaporation Rate: No data

Section 10 – Stability and Reactivity

Stability: Stable under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Strong oxidizing agents.

Conditions to Avoid: Do not store near open flame.

Hazardous Decomposition Products: Primary decomposition products are carbon monoxide, carbon dioxide, and water. Combustion products may include sulfur oxides and hydrogen sulfide.

Section 11 – Toxicological Information

Eye Effects: Vapors may cause a slight smarting of the eyes. **Skin Effects:** Irritating to skin.

Acute Inhalation Effects: Human, inhalation, TC_{LO}: No data. **Acute Oral Effects:** No data

Carcinogenicity: Not a known human carcinogen. **Mutagenicity:** No data.

Teratogenicity: No data.

Chronic Effects: Prolonged and repeated skin contact may cause dermatitis, photosensitization, and melanosis.

Section 12 – Ecological Information

Ecotoxicity: No data.

Environmental Fate:

Environmental Transport: No data.
Environmental Degradation: No data.
Soil Absorption/Mobility: No data.

Section 13 – Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Disposal Regulatory Requirements: Solidified waste material should not be a hazardous waste under RCRA guidelines. Follow Federal, state, and local regulations for disposal of solid waste.

Container Cleaning and Disposal: Recommend using a non-hazardous solvent to remove the product. Follow Federal, state, and local regulations for disposal of the waste material, regardless of its waste classification.

Section 14 – Transport Information

Shipping Name: Not Regulated	Packaging Authorizations:	Quantity Limitations:
Shipping Symbols: NA	a) Exceptions: NA	a) Passenger, Aircraft, or Railcar: NA
Hazard Class: NA	b) Non-bulk Packaging: NA	b) Cargo Aircraft Only: NA
ID No.: NA	c) Bulk Packaging: NA	Vessel Stowage Requirements:
Packing Group: NA		a) Vessel Stowage: NA
Label: NA		b) Other: NA
Special Provisions (172.102): NA		

Section 15 – Regulatory Information

EPA Regulations:

RCRA

RCRA Hazardous Waste Number: Not listed.

RCRA Hazardous Waste Classification (40 CFR 261): This material should not be hazardous due to characteristics.

CERCLA

CERCLA: Not listed.

CERCLA Reportable Quantity (RQ): This material is not a listed hazardous substance and does not have a reportable quantity. However, if spilled into waters of the U.S., it may be reportable under the Clean Water Act.

SARA

SARA 311/312 Codes: Fire–No, Pressure–No, Reactivity–No, Immediate (acute)–Yes, Delayed (chronic)–No.

SARA Toxic Chemical: Not listed.

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed.

OSHA Regulations

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): See Table in Section 2.

OSHA Specifically Regulated Substance: No

State Regulations: None

Section 16 – Other Information

Revision Notes:

Additional Hazard Rating Systems: NAS Hazard Rating for Bulk Water Transportation of asphalt:
Fire – 1, Health – 2, Water Pollution – 1, Reactivity – 0.

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