

# Material Safety Data Sheet

Material Name: FLEXJOINT® POLYSULFIDE JOINT SEALANT HARDENER –

IDs: "

## \*\*\* Section 1 - Chemical Product and Company Identification \*\*\*

Product Trade Name FLEXJOINT POLYSULFIDE JOINT SEALANT HARDENER – PART B

### Manufacturer Information

Ergon Armor (601) 933-3540  
Corrosion Engineering  
P.O. Box 1639 (800) 424-9300  
Jackson, MS 39215-1639

## \*\*\* Section 2 - Composition / Information on Ingredients \*\*\*

CAS #	Component	Percent	OSHA
68515-40-2	Alkyl benzyl ester	35-65	Yes
1313-13-9	Manganese dioxide	45-75	Yes

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Communication Standard (29 CFR 1910.1200)

The components of this product are all on the TSCA inventory list.

## \*\*\* Section 3 - Hazards Identification \*\*\*

### Emergency Overview:

Viscous, medium to dark gray liquid, mild amine odor  
WARNING!  
MAY CAUSE EYE BURNS. MAY CAUSE BLINDNESS.  
MAY CAUSE SEVERE SKIN IRRITATION.  
MAY CAUSE ALLERGIC RESPIRATORY REACTION.  
MAY CAUSE ALLERGIC SKIN REACTION.  
MAY BE HARMFUL IF SWALLOWED.

### Potential Health Effects:

Skin contact and inhalation are expected to be the primary routes of occupational exposure to this material. This material is severely irritating to eyes and skin and, with prolonged contact, can cause burns and irreversible tissue damage. Repeated and/or prolonged exposure may cause allergic reaction/sensitization. Repeated and/or prolonged exposure may result in: adverse respiratory effects (such as cough, tightness of chest or shortness of breath), adverse eye effects (such as conjunctivitis or corneal damage), adverse skin effects (such as defatting, rash or irritation), adverse skin effects, (such as rash, irritation or corrosion). Dryness of nasal passages may be experienced when material is inhaled over a long period of time.

## \*\*\* Section 4 - First Aid Measures \*\*\*

IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention immediately.

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IF ON SKIN, immediately wash with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Destroy contaminated shoes.

IF SWALLOWED, induce vomiting immediately as directed by medical personnel. Get medical attention immediately. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

## \*\*\* Section 5 - Fire Fighting Measures \*\*\*

<b>Flash Point:</b>	>440 deg F (227 deg C)	<b>Method Used:</b>	TCC	<b>Flammability Classification:</b>	
<b>Upper Flammable Limit (UFL):</b>	NE	<b>Lower Flammable Limit (LFL):</b>	NE		

### Fire & Explosion Hazards:

Closed containers of this material may explode when subjected to heat from surrounding fire. Cool exposed containers with water. Avoid breathing fumes from fire exposed material.

### Extinguishing Media:

Use water spray, carbon dioxide, foam or dry chemical.

### Fire-Fighting Instructions:

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

## \*\*\* Section 6 - Accidental Release Measures \*\*\*

### Spill or Leak

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Contain spilled liquid with sand or earth. Clean up spill immediately, observing precautions in the Personal Protection section of MSDS. Avoid runoff into storm sewers and ditches which lead to waterways.

## \*\*\* Section 7 - Handling and Storage \*\*\*

### Handling Procedures:

Do not get in eyes, on skin or clothing. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Empty container may contain hazardous residues.

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## Storage Procedures:

Avoid excessive heat. Store out of direct sunlight in a cool, well-ventilated place.

## \* \* \* Section 8 - Exposure Controls / Personal Protection \* \* \*

### Component Exposure Limits

The established Airborne Exposure Guidelines are shown below:

Manganese Dioxide

ACGIH (TLV-TWA):	0.2 mg/m <sup>3</sup> (as Mn)
OSHA (PEL-Ceiling):	5 mg/m <sup>3</sup> (as Mn)

-Only components with established exposure limits are listed in this section

-Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.

-ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.

### Engineering Controls:

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

### PERSONAL PROTECTIVE EQUIPMENT

As prescribed in the OSHA Standard for Personal Protective Equipment (29 CFR 1910.132), employers must perform a Hazard Assessment of all workplaces to determine the need for, and selection of, proper protective equipment for each task performed.

#### Eyes/Face Protective Equipment:

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment available.

#### Skin Protection:

Neoprene or Polyvinyl chloride gloves should be worn when handling this material. Wear face shield and chemical resistant clothing such as a rubber apron when splashing may occur. Wash contaminated clothing and clean protective equipment before reuse. Rinse contaminated skin promptly. Wash skin thoroughly after handling.

#### Respiratory Protection:

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Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

## \*\*\* Section 9 - Physical & Chemical Properties \*\*\*

**Physical State:** Dark grey paste  
**Odor:** Mild  
**Vapor Density:** Heavier than air  
**Melting Point:** NE  
**pH:** NE  
**VOC:** <1%

**Appearance:** Dark grey paste  
**Vapor Pressure:** <1 mg/Hg @ 20 deg C  
**Boiling Point:** >400 deg F  
**Specific Gravity:** 1.63 @ 25/25 Deg C  
**Viscosity:** NE  
**Solubility Water:** Slightly soluble

## \*\*\* Section 10 - Chemical Stability & Reactivity Information \*\*\*

### Chemical Stability:

This material is chemically stable under normal and anticipated storage and handling conditions.

### Incompatibility:

Avoid contact with strong acids.

### Decomposition Products:

Oxides of carbon and nitrogen.

### Hazardous Polymerization:

Hazardous polymerization is not known to occur.

## \*\*\* Section 11 - Toxicological Information \*\*\*

### Acute Toxicity:

#### A: General Product Information

No information available for the product.

#### B: Component Analysis –

Data on this material and/or its components are summarized below.

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## Manganese Dioxide

LD50 Oral (rat): >3478 mg/kg

May cause abdominal pain and nausea if ingested. Although they are poorly absorbed through the intestines, inorganic manganese salts may produce hypoglycemia and decreased calcium blood levels should absorption occur. Inhalation can cause a flu-like illness (metal fume fever). This 24- to 48-hour illness is characterized by chills, fever, aching muscles, dryness in the mouth and throat and headache. May irritate the respiratory tract. May increase the incidence of upper respiratory infections (pneumonia). Absorption of inorganic manganese salts through the lungs is poor but may occur in chronic poisoning. Chronic manganese poisoning can result from excessive inhalation and ingestion exposure and involves impairment of the central nervous system. Early symptoms include sluggishness, sleepiness, and weakness in the legs. Advanced cases have shown fixed facial expression, emotional disturbances, spastic gait, and falling. Illness closely resembles Parkinson's disease. Kidney effects, blood changes and manganese psychosis also may occur as a result of chronic exposure. Chronic inhalation exposure can cause lung damage.

## Component Carcinogenicity

This product is not listed as a carcinogen by ACGIH, IARC, OSHA, NIOSH, or NTP.

## Chronic Toxicity

No information available for the product.

## Epidemiology:

No information available for the product.

## Neurotoxicity:

No information available for the product.

## Mutagenicity:

No information available for the product.

## Teratogenicity:

No information available for the product.

\* \* \* Section 12 - Ecological Information \* \* \*

## Ecotoxicity:

### A: General Product Information

No information available for the product.

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## B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Data on this material and/or its components are summarized below.

No data are available.

## Environmental Fate:

Data on this material and/or its components are summarized below.

No data are available.

<b>*** Section 13 - Disposal Considerations ***</b>
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## US EPA Waste Numbers & Descriptions:

### A: General Product Information

Recover, reclaim or recycle when practical.

Disposal via incineration is recommended. Appropriate pretreatment and disposal in an authorized landfill is acceptable. In all cases, dispose of material in accordance with all applicable federal, state, and local laws and regulations. Consult appropriate regulatory officials or your attorney for information on such disposal.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

### B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

<b>*** Section 14 - Transportation Information ***</b>
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## US DOT Information

DOT Name: NOT REGULATED BY DOT, IATA/ICAO and IMO/IMDG (as packaged)  
DOT Technical Name:  
DOT Hazard Class:  
UN Number:  
DOT Packing Group:

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## \*\*\* Section 15 - Regulatory Information \*\*\*

### US Federal Regulations

#### A: General Product Information

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

#### B: Component Analysis

##### SARA Title III, Section 313

This product does NOT contain chemical(s) which are defined as toxic chemicals under and subject to the reporting requirements of, Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. See Section 2

This product does NOT contain chemical(s) which are defined as toxic chemicals under and subject to the reporting requirements of SARA Section 302 (40 CFR 355 Appendix A or CERCLA (40 CFR 302.4).

**SARA 311/312: Acute: Y Chronic: Y Fire: N Pressure: N Reactive: N**

##### CERCLA Reportable Quantities (40 CFR 302.4):

NE

### State Regulations

#### A: General Product Information

No additional information available.

#### B: Component Analysis – State

The following components appear on one or more of the following state hazardous substances lists:

##### Massachusetts Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Massachusetts Right to Know Substance List.

Manganese Dioxide  
Alkyl Benzyl Ester

##### New Jersey Right to Know

This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right-to-Know Substances List.

Manganese Dioxide  
Alkyl Benzyl Ester

##### Pennsylvania Right to Know

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This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List.

Manganese Dioxide  
Alkyl Benzyl Ester

## Other Regulations

### A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

### B: Component Analysis – Inventory Component Analysis - Inventory

CAS #	Component	TSCA	DSL	EINECS
1313-13-9	Manganese Dioxide	Yes	Yes	Yes
68515-40-2	Alkyl Benzyl Ester	Yes	Yes	Yes

### C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Disclosure / Classifications
Manganese Dioxide	1313-13-9	Not listed
Alkyl Benzyl Ester	68515-40-2	Not listed

## \*\*\* Section 16 - Other Information \*\*\*

### Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NFPA = National Fire Protection Association; HMIS = Hazardous Material Identification System; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Ergon Armor bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.