



Equi-Pak CS 46122 Part A  
Date Prepared: 3/26/18

**SAFETY DATA SHEET**  
**Regulation (EC) No 1907/2006 (REACH) and 2015/830**

**Section 1. Identification of the Substance/Mixture and of the Company/Undertaking**

**1.1 Product Identifier**

Product Name: Equi-Pak CS 46122 Part A

**1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against**

Product Use: Adhesive

**1.3 Details of the Supplier of the Safety Data Sheet**

Supplier: METREX® RESEARCH  
28210 Wick Rd  
Romulus, MI 48174  
U.S.A.

**1.4 Emergency Telephone Number**

CHEMTREC: 1-703-527-3887 (Outside the US)

**Information Phone Number:** 1-800-841-1428 (Customer Service)

**SDS Date of Preparation/Revision:** March 26, 2018

**Section 2. Hazards Identification**

**2.1 Classification of the Substance or Mixture**

**GHS Classification:**

Acute Toxicity Category 4 H332

Skin Irritation Category 2 H315

Skin Sensitization Category 1 H317

Eye Irritation Category 2 H319

Respiratory Sensitization Category 1 H334

Specific Target Organ Toxicity – Single Exposure Category 3 H335

Carcinogen Category 2 H351

Specific Target Organ Toxicity – Repeated Exposure Category 2 H373

**2.2 Label Elements**

**Danger!**



Contains 1,1'-methylenebis(isocyanatobenzene), Methylenebis(4-cyclohexyl isocyanate)

**Hazard Phrases**

H315 Causes skin irritation.



H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335 May cause respiratory irritation.  
 H351 Suspected of causing cancer.  
 H373 May cause damage to respiratory tract through prolonged or repeated exposure by inhalation.

**Prevention:**

P260 Do not breathe vapors.  
 P280 Wear protective gloves.

**Response:**

P333 + P313 If skin irritation or rash occurs: Get medical attention.  
 P304 + P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.  
 P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.3 Other Hazards:** This product contains isocyanates. Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

**Section 3. Composition/Information On Ingredients**

**3.2 Mixture**

Component	CAS No./ EC No.	Amount	GHS Classification
Urethane Polymer	Proprietary	40-70	Not hazardous
Methylenebis(4-cyclohexyl isocyanate)	5124-30-1 / 255-863-2	10-30	Acute Tox. 2 H330 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Resp. Sens. 1 H334 Skin Sens. 1B H317 STOT SE 3 H335
1,1'-Methylenebis (isocyanatobenzene)	26447-40-5/ 247-714-0	5-20	Acute Tox. 4 H332 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Resp. Sens. 1 H334 Skin Sens. 1B H317 Carc. 2 H351 STOT SE 3 H335 STOT RE 2 H373
1,1'-methylenebis(isocyanatobenzene), homopolymer	39310-05-9	1-10	Not hazardous

**Section 4. First Aid Measures**

**4.1 Description of First Aid Measures**

**Eyes:** Immediately flush eyes with water for 15 minutes while lifting the upper and lower lids. Get medical attention if



irritation persists.

**Skin:** Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation or rash develop, get medical attention. Launder clothing before re-use.

**Inhalation:** Immediately remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get immediate medical attention. Asthma-like symptoms may develop immediately or delayed up to several hours.

**Ingestion:** If conscious, rinse mouth with water. Never give anything by mouth to a person who is unconscious or convulsing. Do not induce vomiting. Get medical attention.

**4.2 Most Important symptoms and effects, both acute and delayed:** Irritating to eyes, skin and respiratory system. May cause allergic skin and respiratory reaction. Harmful if inhaled. Symptoms include respiratory irritation, breathlessness, and chest discomfort and reduced pulmonary function, bronchitis, bronchial spasms and pulmonary edema. Symptoms may be delayed. Individuals sensitized to isocyanates may have a life-threatening allergic reaction. Prolonged or repeated exposure may cause damage to the lungs by inhalation. May cause cancer based on animal data.

**4.3 Indication of any immediate medical attention and special treatment needed:** If respiratory sensitization reaction occurs, get immediate medical attention. Symptoms may be delayed for several hours after exposure. Respiratory sensitization may be life threatening.

## Section 5. Firefighting Measures

**5.1 Extinguishing Media:** Use any extinguishing media that is appropriate for the surrounding fire. Cool fire exposed containers with water.

**5.2 Special Hazards arising from the Substance or Mixture:** Combustion may produce carbon and nitrogen oxides, hydrogen cyanide and other toxic gases.

**5.3 Advice for Firefighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored. Do not allow run-off from firefighting to enter drains or water courses. Decontaminate equipment and protective clothing before reuse.

## Section 6: Accidental Release Measures

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate protective clothing as described in Section 8. Isolate the area and prevent access. Ventilate the area.

**6.2 Environmental Precautions:** Avoid release to the environment. Report spill as required by local and federal regulations.

**6.3 Methods and Material for Containment and Cleaning Up:** Contain spill. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Place in an approved container for disposal. Do not seal the container for 48 hours to avoid pressure build-up. Clean up residue with an appropriate solvent. Ventilate the area with fresh air.



#### 6.4 Reference to Other Sections:

Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

### Section 7. Handling and Storage

**7.1 Precautions for Safe Handling:** Do not breathe vapors or mists. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Wear appropriate eye and skin protection. Wash thoroughly after handling. Do not remove contaminated clothing from work area.

**7.2 Conditions for Safe Storage, Including any Incompatibilities:** Store in a dry, well ventilated area. Away from oxidizing agents and other incompatible materials. Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected.

**7.3 Specific end use(s):** Adhesive

### Section 8. Exposure Controls/Personal Protection

#### 8.1 Control Parameters:

Chemical	Exposure Limit
Urethane Polymer	None Established
Methylenebis(4-cyclohexyl isocyanate)	0.02 mg/m <sup>3</sup> TWA UK OEL (as isocyanates)
1,1'-Methylenebis(isocyanatobenzene)	0.02 mg/m <sup>3</sup> TWA UK OEL (as isocyanates)
1,1'-methylenebis(isocyanatobenzene), homopolymer	None Established

#### 8.2 Exposure Controls:

**Recommended Monitoring Procedures:** Contact professional occupational hygienist for monitoring.

**Appropriate Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits. If ventilation is not adequate, use respiratory protection equipment.

#### Personal Protective Measurers

**Respiratory Protection:** If the exposure limits are exceeded or if exposure levels are unknown, an approved positive pressure air supplied respirator with a full facepiece or air supplied hood should be used. Based on the results of the exposure assessment, a half-face full facepiece air-purifying respirator suitable for organic vapors and particulates should be used with A & P filters. Select in accordance with EU standard EN 140 or EN 136, other applicable regulations and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus

**Hand protection:** Impervious gloves such as butyl rubber, fluoroelastomer, nitrile rubber are recommended. Select in accordance with EU standard EN 374

**Eye Protection:** Indirect vented goggles are recommended. Select in accordance with EU standard EN 166.

**Skin Protection:** Wear protective clothing as needed to avoid skin contact.



**Other protection:** Wash contaminated clothing or dispose of properly. A safety shower and eye wash should be available in the immediate work area.

## Section 9. Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties:

Appearance:	Viscous liquid	Vapor Pressure:	<0 Pa @ 20°C
Odor:	No detectable odor.	Vapor Density:	>1 (air = 1)
Odor Threshold:	Not available	Relative Density /Specific Gravity:	1.1
pH:	Not applicable	Solubility in Water:	Negligible
Melting/Freezing Point:	Not available	Partition Coefficient: (n-octanol/water)	Not applicable
Initial Boiling Point/Range:	>204.4°C / >399.9°F	Auto-ignition Temperature:	Not applicable
Flash Point:	>143.3°C (289.94°F) TCC	Decomposition Temperature:	Not applicable
Evaporation Rate:	Gels with exposure to humidity	Viscosity:	Not determined
Flammability: (solid/gas)	Not applicable	Explosive Properties:	None
Flammable/ Explosive Limits:	Not applicable	Oxidizing Properties:	None

**9.2 Other Information:** None

## Section 10. Stability and Reactivity

**10.1 Reactivity:** Reacts with water to form carbon dioxide.

**10.2 Chemical Stability:** Stable under normal storage and handling conditions.

**10.3 Possibility of Hazardous Reactions:** Polymerization will occur when exposure to water or moisture.

**10.4 Conditions to Avoid:** Avoid contamination with moisture.

**10.5 Incompatible Materials:** Water, strong acids and strong bases.

**10.6 Hazardous Decomposition Products:** Thermal decomposition will produce oxides of carbon and nitrogen, hydrogen cyanide and other highly toxic gases.

## Section 11. Toxicological Information

### 11.1 Information on Toxicological Effects:

#### Potential Health Effects:

**Inhalation:** Harmful if inhaled. Inhalation of vapors or mists may cause mucous membrane and respiratory irritation. Inhalation of mists may cause an allergic reaction. Symptoms include dryness of the throat, tightness of chest and difficulty in breathing, breathlessness, chest discomfort, reduced pulmonary function, bronchitis, bronchial spasms and pulmonary edema. Symptoms may be delayed for several hours after exposure. The allergic respiratory reaction may be life threatening.

**Skin Contact:** Skin contact may cause irritation with redness, itching and swelling. May cause allergic skin reaction.



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**Eye Contact:** May cause irritation with redness, tearing, stinging and swelling.

**Ingestion:** Swallowing may cause gastrointestinal irritation abdominal pain, nausea, vomiting and diarrhea.

**Acute Toxicity Values:** No toxicity data is available for the product.

Acute Toxicity Estimate (ATE): Oral: >5,000 mg/kg Inhalation 1.12 mg/L/4 hr

Methylenebis(4-cyclohexyl isocyanate) Oral rat LD50 9980 mg/kg; Inhalation rat LC50 0.368 mg/L/4 hr; Dermal rabbit LD50 >10,000 mg/kg.

1,1'-Methylenebis (isocyanatobenzene) Oral rat LD50 31,600 mg/kg; Inhalation rat LC50 0.368 mg/L/4 hr; Dermal rabbit LD50 >5,000 mg/kg.

1,1'-methylenebis(isocyanatobenzene), homopolymer: No toxicity data available

**Skin corrosion/irritation:** Isocyanates are known to cause skin irritation in studies with laboratory animals.

**Eye damage/ irritation:** Isocyanates are known to cause eye irritation in studies with laboratory animals

**Skin Sensitization:** Isocyanates are known to cause skin sensitization in studies with laboratory animals.

**Respiratory Sensitization:** Isocyanates are known to cause respiratory sensitization in humans. Animal tests have indicated that respiratory sensitization can result from skin contact with isocyanates.

**Germ Cell Mutagenicity:** None of the components have been shown to cause germ cell mutagenicity.

**Carcinogenicity:** 1,1'-Methylenebis (isocyanatobenzene) is classified as a "Suspected of causing cancer" (Carcinogen Category 2) by the EU CLP.

**Developmental / Reproductive Toxicity:** None of the components are classified as reproductive or developmental toxins.

**Specific Target Organ Toxicity (Single Exposure):** Isocyanates are known to cause respiratory irritation.

**Specific Target Organ Toxicity (Repeated Exposure):** Prolonged exposure to isocyanates may cause chronic irritation, decreased lung function and lung damage and conjunctivitis.

**Aspiration Toxicity:** None of the components are aspiration hazards.

## Section 12. Ecological Information

**12.1 Toxicity:** No toxicity data available for product

Methylenebis(4-cyclohexyl isocyanate): 96 hr EC50 zebra fish 1.2 mg/L, 48 hr EC50 daphnia magna 7.07 mg/L

1,1'-Methylenebis (isocyanatobenzene): No data available

1,1'-methylenebis(isocyanatobenzene), homopolymer: 24 hr EC50 daphnia magna >100 mg/L

**12.2 Persistence and Degradability:** 1,1'-Methylenebis (isocyanatobenzene) is not readily biodegradable.

**12.3 Bioaccumulative Potential:** Isocyanates hydrolyze rapidly in aqueous solutions, therefore bioconcentration is not an important environmental fate process.

**12.4 Mobility in Soil:** Isocyanates hydrolyze rapidly in aqueous solutions, therefore leaching and adsorption to moist soil and sediment will not be an important environmental fate process.



**12.5 Results of PBT and vPvB assessment:** This product is not a PBT and vPvB.

**12.6 Other Adverse Effects:** None known.

**Section 13. Disposal Considerations**

**13.1 Waste Treatment Methods:**

Dispose of contents and container in accordance with all local and national regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration. Polymerized material may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations.

Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

**Section 14. Transport Information**

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class(es)	14.4 Packing Group	14.5 Environmental Hazards
US DOT		Not Regulated			
EU ADR/RID		Not Regulated			
IMDG		Not Regulated			
IATA/ICAO		Not Regulated			

**14.6 Special Precautions for User:** None identified

**14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code:** Not applicable

**Section 15. Regulatory Information**

**15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture**

**16. Other Information**

**GHS Classification for Reference (See Sections 2 and 3):**

- Acute Tox. 2 Acute Toxicity Category 2
- Acute Tox. 4 Acute Toxicity Category 4
- Skin Irrit. 2 Skin Irritation Category 2
- Skin Sens. 1B Skin Sensitization Category 1
- Eye Irrit. 2 Eye Irritation Category 2
- Resp. Sens. 1 Respiratory Sensitization Category 1
- Carc. 2 Carcinogen Category 2
- STOT SE 3 Specific Target Organ Toxicity – Single Exposure Category 3



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STOT RE 2 Specific Target Organ Toxicity – Repeated Exposure Category 2

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory Irritation.

H351 Suspected of causing cancer.

H373 May cause damage to respiratory tract through prolonged or repeated exposure by inhalation.

**Effective Date:** March 26, 2018

**Supersedes Date:** New SDS

**Revision Summary:** New SDS

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date of preparation, however, METREX® RESEARCH makes no warranty with respect to the accuracy or suitability of the recommendations, and assumes no liability to any use thereof.





Equi-Pak CS Instant Pad Material Soft 46122 Part B  
Date Prepared: 4/2/18

**SAFETY DATA SHEET**  
Regulation (EC) No 1907/2006 (REACH) and 2015/830

**Section 1. Identification of the Substance/Mixture and of the Company/Undertaking**

**1.1 Product Identifier**

Product Name: Equi-Pak Instant Pad Material Soft 46121 Part B

**1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against**

Product Use: Adhesive

**1.3 Details of the Supplier of the Safety Data Sheet**

Supplier: METREX® RESEARCH  
28210 Wick Rd  
Romulus, MI 48174  
U.S.A.

**1.4 Emergency Telephone Number**

CHEMTREC: 1-703-527-3887 (Outside the US)

Information Phone Number: 1-800-841-1428 (Customer Service)

SDS Date of Preparation/Revision: April 2, 2018

**Section 2. Hazards Identification**

**2.1 Classification of the Substance or Mixture**

**GHS Classification:**

Skin Sensitization Category 1 H317

Hazardous to the Aquatic Environment Chronic Hazard Category 3

**2.2 Label Elements**

**Warning!**



Contains Polymeric Benzotriazole Derivative, Polymeric Benzotriazole, Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

**Hazard Phrases**

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects

**Prevention:**

P280 Wear protective gloves.

**Response:**



P333 + P313 If skin irritation or rash occurs: Get medical attention.

**Disposal**

P501 Dispose of contents and container in accordance with local and national regulations.

**2.3 Other Hazards:** Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines

**Section 3. Composition/Information On Ingredients**

**3.2 Mixture**

Component	CAS No./ EC No.	Amount	GHS Classification
Glycerol Poly(Oxyethylene, Oxypropylene) Ether	9082-00-2	40-70	Not hazardous
Trimethylolpropane Poly(Oxypropylene) Triether	25723-16-4 / 500-041-9	10-30	Not hazardous
Polypropylene Glycol	25322-69-4 / 500-039-8	10-30	Not hazardous
Tetrakis(2-hydroxypropyl)ethylenediamine	102-60-3 / 203-041-4	5-<10	Eye Irrit 2 H319
1,4 Butanediol	110-63-4 / 302-786-5	1-5	Acute Tox 4 H302 STOT SE 3 H336
Bismuth Trineodecanoate	34364-26-6 / 251-964-6	1-5	Not hazardous
Neodecanoic Acid	26896-20-8 / 248-093-9	1-5	Not hazardous
Polymeric Benzotriazole Derivative	104810-48-2	<0.3	Skin Sens 1 H317
Polymeric Benzotriazole	104810-47-1	0.2	Skin Sens 1 H317
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	1065336-91-5 / 915-687-0	<1	Skin Sens 1A H317 Aquatic Acute 1 H400 Aquatic Chronic 1 H410

**Section 4. First Aid Measures**

**4.1 Description of First Aid Measures**

**Eyes:** Immediately flush eyes with water for several minutes while lifting the upper and lower lids. Get medical attention if irritation persists.

**Skin:** Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation or rash develop, get medical attention. Launder clothing before re-use.

**Inhalation:** Immediately remove to fresh air. If breathing is difficult or other symptoms develop, get medical attention.

**Ingestion:** If conscious, rinse mouth with water. Never give anything by mouth to a person who is unconscious or convulsing. Do not induce vomiting. Get medical attention.



**4.2 Most Important symptoms and effects, both acute and delayed:** May cause mild eye irritation. Prolonged skin contact may cause irritation. May cause allergic skin reaction.

**4.3 Indication of any immediate medical attention and special treatment needed:** None needed under normal conditions of use.

### Section 5. Firefighting Measures

**5.1 Extinguishing Media:** Use any extinguishing media that is appropriate for the surrounding fire. Cool fire exposed containers with water.

**5.2 Special Hazards arising from the Substance or Mixture:** Combustion may produce carbon and nitrogen oxides and aldehydes.

**5.3 Advice for Firefighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

### Section 6: Accidental Release Measures

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate protective clothing as described in Section 8. Ventilate the area. Evacuate area. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice.

**6.2 Environmental Precautions:** Avoid release to the environment. Report spill as required by local and federal regulations.

**6.3 Methods and Material for Containment and Cleaning Up:** Contain spill. Cover with absorbent material. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Place in an approved container for disposal. Seal container.

**6.4 Reference to Other Sections:**

Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

### Section 7. Handling and Storage

**7.1 Precautions for Safe Handling:** Avoid breathing vapors or mists. Avoid contact with eyes, skin, or clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse.

**7.2 Conditions for Safe Storage, Including any Incompatibilities:** Store in a well-ventilated place. Store away from oxidizing agents and other incompatible materials.

**7.3 Specific end use(s):** Adhesive

### Section 8. Exposure Controls/Personal Protection

**8.1 Control Parameters:**



Chemical	Exposure Limit
Glycerol Poly(Oxyethylene, Oxypropylene) Ether	None Established
Trimethylolpropane Poly(Oxypropylene) Triether	None Established
Polypropylene Glycol	None Established
Tetrakis(2-hydroxypropyl)ethylenediamine	None Established
1,4 Butanediol	None Established
Bismuth Trineodecanoate	None Established
Neodecanoic Acid	None Established
Polymeric Benzotriazole Derivative	None Established
Polymeric Benzotriazole	None Established
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	None Established

## 8.2 Exposure Controls:

**Recommended Monitoring Procedures:** Contact professional occupational hygienist for monitoring.

**Appropriate Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits. If ventilation is not adequate, use respiratory protection equipment.

### Personal Protective Measurers

**Respiratory Protection:** Based on the results of the exposure assessment, a half-face air-purifying respirator suitable for organic vapors and particulates should be used with A & P filters. Select in accordance with EU standard EN 140 or EN 136, other applicable regulations and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

**Hand protection:** Impervious gloves such as polymer laminate are recommended. Select in accordance with EU standard EN 374

**Eye Protection:** Indirect vented goggles are recommended. Select in accordance with EU standard EN 166.

**Skin Protection:** Wear protective clothing as needed to avoid skin contact.

**Other protection:** Wash contaminated clothing or dispose of properly. A safety shower and eye wash should be available in the immediate work area.

## Section 9. Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties:

<b>Appearance:</b>	Clear, viscous liquid	<b>Vapor Pressure:</b>	Not available
<b>Odor:</b>	None	<b>Vapor Density:</b>	>1 (air = 1)
<b>Odor Threshold:</b>	Not available	<b>Relative Density /Specific Gravity:</b>	1.03
<b>pH:</b>	Not applicable	<b>Solubility in Water:</b>	Negligible



<b>Melting/Freezing Point:</b>	Not available	<b>Partition Coefficient: (n-octanol/water)</b>	Not applicable
<b>Initial Boiling Point/Range:</b>	Not available	<b>Auto-ignition Temperature:</b>	Not applicable
<b>Flash Point:</b>	>143.3°C (>289.94°F) TCC	<b>Decomposition Temperature:</b>	Not applicable
<b>Evaporation Rate:</b>	<1 (water = 1)	<b>Viscosity:</b>	800-1,200 mPas
<b>Flammability: (solid/gas)</b>	Not applicable	<b>Explosive Properties:</b>	None
<b>Flammable/Explosive Limits:</b>	Not applicable	<b>Oxidizing Properties:</b>	None

9.2 Other Information: None

### Section 10. Stability and Reactivity

**10.1 Reactivity:** Not expected to react under normal handling.

**10.2 Chemical Stability:** Stable under normal storage and handling conditions.

**10.3 Possibility of Hazardous Reactions:** None known.

**10.4 Conditions to Avoid:** None known.

**10.5 Incompatible Materials:** Strong acids and strong oxidizing agents. .

**10.6 Hazardous Decomposition Products:** Thermal decomposition will produce oxides of carbon and nitrogen and aldehydes.

### Section 11. Toxicological Information

#### 11.1 Information on Toxicological Effects:

##### Potential Health Effects:

**Inhalation:** May cause respiratory irritation with coughing, sneezing, nasal discharge, headache, hoarseness and nose and throat pain.

**Skin Contact:** May cause mild skin irritation. May cause allergic skin reaction with redness, swelling, blistering, and itching.

**Eye Contact:** May cause mild eye irritation.

**Ingestion:** Swallowing may cause gastrointestinal irritation, abdominal pain, nausea, vomiting and diarrhea.

**Acute Toxicity Values:** No toxicity data is available for the product.

Acute Toxicity Estimate (ATE): Oral: >5,000 mg/kg, Inhalation >5 mg/L/4hr, Dermal >2000 mg/L

Glycerol Poly(Oxyethylene,Oxypropylene) Ether: Oral rat LD50 >10,000 mg/kg, Dermal rabbit LD50 >5,000

Trimethylolpropane Poly(Oxypropylene) Triether: Oral rat LD50>2,500 mg/kg, Dermal rabbit LD50 >2,000 mg/kg

Polypropylene Glycol: Oral rat LD50 22,000 mg/kg, Dermal rabbit LD50 >2000 mg/kg (no mortalities), Inhalation rat LC50 >2.34 mg/L/4 hr (no mortalities)

Tetrakis(2-hydroxypropyl)ethylenediamine: Oral rat LD50 2890 mg/kg, Dermal rabbit LD50 >2,000 mg/kg

1,4 Butanediol: Oral rat LD50 1500 mg/kg, Inhalation rat LC50 >5.14 mg/L/4 hr, Dermal rat LD50 >2000 mg/kg

Bismuth Trineodecanoate: No toxicity data available

Neodecanoic Acid: Oral rat LD50 2066 mg/kg, Inhalation rat LC50 >3 mg/L/6 hr, Dermal rat LD50 >3640 mg/L



Polymeric Benzotriazole Derivative: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >5.8 mg/L/4 hr, Dermal rat LD50 >2000 mg/kg  
Polymeric Benzotriazole: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >5.8 mg/L/4 hr, Dermal rat LD50 >2000 mg/kg  
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate: Oral rat LD50 3250 mg/kg, Dermal rat LD50 >3170

**Skin corrosion/irritation:** None of the components have been shown to cause skin corrosion or irritation.

**Eye damage/ irritation:** Tetrakis(2-hydroxypropyl)ethylenediamine is irritating to rabbit eyes. This product is not classified as an eye irritant.

**Skin Sensitization:** Polymeric benzotriazole derivative, polymeric benzotriazole and reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate have been shown to cause skin sensitization in studies with laboratory animals.

**Respiratory Sensitization:** No data available. This product is not expected to cause respiratory sensitization. .

**Germ Cell Mutagenicity:** None of the components have been shown to cause germ cell mutagenicity.

**Carcinogenicity:** None of the components are classified as a carcinogen by the EU CLP.

**Developmental / Reproductive Toxicity:** None of the components are classified as reproductive or developmental toxins.

**Specific Target Organ Toxicity (Single Exposure):** No data available.

**Specific Target Organ Toxicity (Repeated Exposure):** This product is not expected to cause adverse effects from chronic exposure.

**Aspiration Toxicity:** None of the components are aspiration hazards.

## Section 12. Ecological Information

**12.1 Toxicity:** No toxicity data available for product

Glycerol Poly(Oxyethylene, Oxypropylene) Ether: 96 hr LC50 Danio rerio >100 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC50 green algae >100 mg/L

Trimethylolpropane Poly(Oxypropylene) Triether: 96 hr LC50 Danio rerio >100 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC0 Desmodesmus subspicatus >100 mg/L (read across)

Polypropylene Glycol: 96 hr LC50 Oryzias latipes >1000 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC Desmodesmus subspicatus >100 mg/L

Tetrakis(2-hydroxypropyl)ethylenediamine: 96 hr EC50 Leuciscus idus 4600 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC50 Desmodesmus subspicatus 150.67 mg/L (read across)

1,4 Butanediol: 96 hr LC50 Pimephales promelas >30,000 mg/L, 48 hr EC50 daphnia magna 819 mg/L, 72 hr EC50 Desmodesmus subspicatus >500 mg/L

Bismuth Trineodecanoate: No data available

Neodecanoic Acid: 96 hr LL50 Oncorhynchus mykiss 100-300 mg/L, 48 hr EL50 daphnia magna >1000 mg/L, 72 hr EC50 Pseudokirchneriella subcapitata >100 mg/L

Polymeric Benzotriazole Derivative: 96 hr LC50 Lepomis macrochirus 3.6 mg/L

Polymeric Benzotriazole: 96 hr LC50 Lepomis macrochirus 3.6 mg/L



Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate: 96 hr LC50 Danio rerio 0.9 mg/L, 72 hr EC50 Desmodemus subspicatus 1.68 mg/L

**12.2 Persistence and Degradability:** Trimethylolpropane poly(oxypropylene) triether is readily biodegradable. Polypropylene glycol and reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate are inherently biodegradable. Tetrakis(2-hydroxypropyl)ethylenediamine, neodecanoic acid, polymeric benzotriazole derivative and polymeric benzotriazole are not readily biodegradable.

**12.3 Bioaccumulative Potential:** Tetrakis(2-hydroxypropyl)ethylenediamine and trimethylolpropane poly(oxypropylene) triether have a BCF <3.

**12.4 Mobility in Soil:** No data available.

**12.5 Results of PBT and vPvB assessment:** This product is not a PBT and vPvB.

**12.6 Other Adverse Effects:** None known.

<b>Section 13. Disposal Considerations</b>
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**13.1 Waste Treatment Methods:**

Dispose of contents and container in accordance with all local and national regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incine polymerized may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations.

Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

<b>Section 14. Transport Information</b>
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	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class(es)	14.4 Packing Group	14.5 Environmental Hazards
<b>US DOT</b>		Not Regulated			
<b>EU ADR/RID</b>		Not Regulated			
<b>IMDG</b>		Not Regulated			
<b>IATA/ICAO</b>		Not Regulated			

**14.6 Special Precautions for User:** None identified

**14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code:** Not applicable

<b>Section 15. Regulatory Information</b>
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Equi-Pak CS Instant Pad Material Soft 46122 Part B  
Date Prepared: 4/2/18

### 15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

**Other EU Regulations:** This product is classified and labeled in accordance with CLP Regulation. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 (REACH)

<b>16. Other Information</b>
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**GHS Classification for Reference (See Sections 2 and 3):**

Acute Tox. 4 Acute Toxicity Category 4  
Skin Sens. 1 Skin Sensitization Category 1  
Skin Sens. 1A Skin Sensitization Category 1A  
STOT SE 3 Specific Target Organ Toxicity Single Exposure Category 3  
Aquatic Acute 1 Hazardous to the Aquatic Environment Acute Hazard Category 1  
Aquatic Chronic 1 Hazardous to the Aquatic Environment Chronic Hazard Category 1  
H302 Harmful if swallowed  
H317 May cause an allergic skin reaction.  
H336 May cause drowsiness or dizziness.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

**Effective Date:** April 2, 2018  
**Supersedes Date:** New SDS  
**Revision Summary:** New SDS

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