



This is a kit that contains the following components:

POLYSEAL HS PART A, POLYSEAL HS PART A

POLYSEAL HS 1:1 PART B, POLYSEAL PART B



# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** POLYSEAL HS PART A, POLYSEAL HS PART A  
**Product Code:** CPLK G002 000

### Recommended use and restriction on use

**Recommended use:** Coatings  
**Restrictions on use:** Not known.

### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY  
19218 REDWOOD ROAD  
CLEVELAND OH 44110  
US

**Contact person:** EH&S Department  
**Telephone:** 216-531-9222  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

Acute toxicity (Inhalation - vapor)	Category 4
Acute toxicity (Inhalation - dust and mist)	Category 4
Skin sensitizer	Category 1
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1B

#### Unknown toxicity - Health

Acute toxicity, oral	10.36 %
Acute toxicity, dermal	10.36 %
Acute toxicity, inhalation, vapor	99.99 %
Acute toxicity, inhalation, dust or mist	16.58 %

#### Environmental Hazards

Chronic hazards to the aquatic environment	Category 3
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#### Unknown toxicity - Environment

Acute hazards to the aquatic environment	99.99 %
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Chronic hazards to the aquatic environment 19.29 %

## Label Elements

### Hazard Symbol:



**Signal Word:** Danger

**Hazard Statement:** Harmful if inhaled.  
May cause an allergic skin reaction.  
May cause genetic defects.  
May cause cancer.  
Harmful to aquatic life with long lasting effects.

### Precautionary Statements

**Prevention:** Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

**Response:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). Wash contaminated clothing before reuse.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):** None.

## 3. Composition/information on ingredients

### Mixtures



Chemical Identity	CAS number	Content in percent (%)*
Aspartic acid,N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester	136210-30-5	50 - <100%
Aspartic acid, N,N-methylenebis(2-methyl-4,1-cyclohexanediyl)bis-, tetraethyl ester	136210-32-7	10 - <25%
(1-methylethyl)-1,1'-Biphenyl	25640-78-2	1 - <5%
Petroleum naphtha, heavy alkylate	64741-65-7	0.1 - <1%
Stoddard solvent (Mineral Spirits)	8052-41-3	0.1 - <1%
1,2,4-Trimethylbenzene	95-63-6	0 - <1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

##### Description of necessary first-aid measures

- Inhalation:** Move to fresh air.
- Skin Contact:** Get medical attention if symptoms occur. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.
- Eye contact:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.
- Ingestion:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
- Personal Protection for First-aid Responders:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

##### Most important symptoms/effects, acute and delayed

- Symptoms:** May cause skin and eye irritation.
- Hazards:** No data available.

##### Indication of immediate medical attention and special treatment needed

- Treatment:** Symptoms may be delayed.

#### 5. Fire-fighting measures

- General Fire Hazards:** No unusual fire or explosion hazards noted.

##### Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.



**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

#### Special protective equipment and precautions for fire-fighters

**Special fire-fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Accidental release measures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Methods and material for containment and cleaning up:** Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

### 7. Handling and storage

#### Handling

**Technical measures (e.g. Local and general ventilation):** Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Safe handling advice:** Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing.

**Contact avoidance measures:** No data available.

**Hygiene measures:** Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

#### Storage

**Safe storage conditions:** Store locked up.



Safe packaging materials: No data available.

**8. Exposure controls/personal protection****Control Parameters****Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values	Source
Petroleum naphtha, heavy alkylate	PEL	100 ppm 400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Stoddard solvent (Mineral Spirits)	TWA	100 ppm	US. ACGIH Threshold Limit Values, as amended (2008)
	PEL	500 ppm 2,900 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
1,2,4-Trimethylbenzene	REL	25 ppm 125 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	TWA	25 ppm 125 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	25 ppm	US. ACGIH Threshold Limit Values, as amended (2008)

Chemical name	Type	Exposure Limit Values	Source
Dipropylene glycol methyl ether acetate	TWA	100 ppm 776 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	STEL	150 ppm 1,164 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)

Chemical name	Type	Exposure Limit Values	Source
Dipropylene glycol methyl ether acetate	TWA	100 ppm 776 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	STEL	150 ppm 1,164 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Petroleum naphtha, heavy alkylate	TWA	525 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Petroleum naphtha, heavy alkylate	TWA	1,000 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)
Stoddard solvent (Mineral Spirits)	STEL	580 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	290 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)



Stoddard solvent (Mineral Spirits)	TWA	100 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Stoddard solvent (Mineral Spirits)	TWA	100 ppm	525 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
1-Methoxy-2-propanol acetate	TWA	50 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	75 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1-Methoxy-2-propanol acetate	TWA	50 ppm	270 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (12 2007)
1,2,4-Trimethylbenzene	TWA	25 ppm	123 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
1,2,4-Trimethylbenzene	TWA	25 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1,2,4-Trimethylbenzene	TWA	25 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
1,2,4-Trimethylbenzene	TWA	25 ppm		Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment****Eye/face protection:**

Wear safety glasses with side shields (or goggles).

**Skin Protection****Hand Protection:**

Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:**

Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:**

In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:**

Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

**9. Physical and chemical properties**

**Appearance**

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Mild petroleum/solvent
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	Slower than Ether
<b>Flammability (solid, gas):</b>	No
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
<b>Relative density:</b>	1.03
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Practically Insoluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

**10. Stability and reactivity**

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	Alcohols. Amines. Strong acids. Strong bases. Water, moisture.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

**11. Toxicological information****Information on likely routes of exposure**





<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	May be harmful in contact with skin. May cause an allergic skin reaction.
<b>Eye contact:</b>	Eye contact is possible and should be avoided.
<b>Ingestion:</b>	May be harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)****Oral**

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**

Aspartic acid,N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester LD 50 (Rat): > 2,000 mg/kg

Aspartic acid, N,N-methylenebis(2-methyl-4,1-cyclohexanediyl)bis-, tetraethyl ester LD 50 (Rat): > 2,000 mg/kg

(1-methylethyl)-1,1'-Biphenyl LD 50 (Rat): 4,650 mg/kg

1,2,4-Trimethylbenzene LD 50 (Rat): 3,280 mg/kg

**Dermal**

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**

Aspartic acid,N,N'-  
(methylenedi-4,1-  
cyclohexanediyl)bis-,  
1,1',4,4'-tetraethyl ester      LD 50 (Rat): > 2,000 mg/kg

Aspartic acid, N,N-  
methylenebis(2-methyl-  
4,1-cyclohexanediyl)bis-,  
tetraethyl ester      LD 50 (Rat): > 2,000 mg/kg

(1-methylethyl)-1,1'-  
Biphenyl      LD 50 (Rabbit): > 5,000 mg/kg

1,2,4-Trimethylbenzene      LD 50 (Rat): 3,440 mg/kg

**Inhalation**

**Product:**      ATEmix: 11 mg/l  
ATEmix : 2.78 mg/l

**Repeated dose toxicity**

**Product:**      No data available.

**Skin Corrosion/Irritation**

**Product:**      No data available.

**Specified substance(s):**

(1-methylethyl)-1,1'-  
Biphenyl      in vivo (Rabbit): Not irritant , 24 - 72 h

1,2,4-Trimethylbenzene      in vivo (Rabbit): Irritating , 24 - 72 h

**Serious Eye Damage/Eye Irritation**

**Product:**      No data available.

**Specified substance(s):**

1,2,4-Trimethylbenzene      Rabbit, 30 min: Not irritant

**Respiratory or Skin Sensitization**

**Product:**      No data available.

**Carcinogenicity**

**Product:**      May cause cancer.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogenic components identified

**Germ Cell Mutagenicity****In vitro****Product:** No data available.**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** No data available.**Other effects:**

No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Aspartic acid,N,N'-  
(methylenedi-4,1-  
cyclohexanediyl)bis-,  
1,1',4,4'-tetraethyl ester  
LC 50 (Danio rerio, 96 h): 66 mg/l Read-across from supporting substance  
(structural analogue or surrogate), Key study



Aspartic acid, N,N-methylenebis(2-methyl-4,1-cyclohexanediyl)bis-, tetraethyl ester LC 50 (Danio rerio, 96 h): 66 mg/l Experimental result, Key study

(1-methylethyl)-1,1'-Biphenyl LC 50 (Oryzias latipes, 96 h): 0.6 mg/l Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study

1,2,4-Trimethylbenzene LC 50 (Pimephales promelas, 96 h): 7.72 mg/l Experimental result, Key study

#### Aquatic Invertebrates

##### Product:

No data available.

##### Specified substance(s):

Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester EC 50 (Daphnia magna, 48 h): 88.6 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Key study

Aspartic acid, N,N-methylenebis(2-methyl-4,1-cyclohexanediyl)bis-, tetraethyl ester EC 50 (Daphnia magna, 48 h): 88.6 mg/l experimental result Experimental result, Key study

(1-methylethyl)-1,1'-Biphenyl EC 50 (Daphnia magna, 48 h): 0.24 mg/l experimental result Experimental result, Key study

Stoddard solvent (Mineral Spirits) LC 50 (Daphnia magna, 48 h): 0.42 - 2.3 mg/l

1,2,4-Trimethylbenzene LC 50 (Daphnia magna, 48 h): 3.6 mg/l experimental result Experimental result, Key study

#### Chronic hazards to the aquatic environment:

##### Fish

##### Product:

No data available.

#### Aquatic Invertebrates

##### Product:

No data available.

##### Specified substance(s):

Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester NOAEL (Daphnia magna): 0.013 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Key study

Aspartic acid, N,N-methylenebis(2-methyl-4,1-cyclohexanediyl)bis-, tetraethyl ester NOAEL (Daphnia magna): 0.013 mg/l experimental result Experimental result, Key study

(1-methylethyl)-1,1'-Biphenyl EC 50 (Daphnia magna): 0.082 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance



(structural analogue or surrogate), Key study

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability****Biodegradation**

**Product:** No data available.

**Specified substance(s):**

Aspartic acid,N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester 16.1 % Detected in water. Experimental result, Key study

Aspartic acid, N,N-methylenebis(2-methyl-4,1-cyclohexanediyl)bis-, tetraethyl ester 18 % Detected in water. Experimental result, Key study

(1-methylethyl)-1,1'-Biphenyl 97 % Detected in water. Experimental result, Key study

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential****Bioconcentration Factor (BCF)**

**Product:** No data available.

**Specified substance(s):**

Aspartic acid,N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester Bioconcentration Factor (BCF): 1,872 Aquatic sediment Estimated by calculation, Supporting study

Aspartic acid, N,N-methylenebis(2-methyl-4,1-cyclohexanediyl)bis-, tetraethyl ester Bioconcentration Factor (BCF): 8,228 Aquatic sediment Estimated by calculation, Supporting study

(1-methylethyl)-1,1'-Biphenyl Jordanella floridiae, Bioconcentration Factor (BCF): 2,896 Aquatic sediment Experimental result, Key study

1,2,4-Trimethylbenzene Pimephales promelas, Bioconcentration Factor (BCF): 243 Aquatic sediment QSAR, Key study

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Specified substance(s):**



Aspartic acid, N,N-methylenebis(2-methyl-4,1-cyclohexanediyl)bis-, tetraethyl ester      Log Kow: 7 - 8.2 Yes Estimated by calculation, Supporting study

(1-methylethyl)-1,1'-Biphenyl      Log Kow: 5.20

1,2,4-Trimethylbenzene      Log Kow: 3.78

**Mobility in soil:**      No data available.

**Other adverse effects:**      Harmful to aquatic life with long lasting effects.

### 13. Disposal considerations

**Disposal methods:**      Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:**      No data available.

### 14. Transport information

**TDG:**

Not Regulated

**CFR / DOT:**

Not Regulated

**IMDG:**

Not Regulated

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

### 15. Regulatory information

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.



**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

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

**Hazard categories**

Immediate (Acute) Health Hazards  
Delayed (Chronic) Health Hazard  
Acute toxicity (any route or exposure)  
Respiratory or Skin Sensitization  
Germ Cell Mutagenicity  
Carcinogenicity

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

Not regulated.

**US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting**

**Chemical Identity                      % by weight**

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**VOC:** When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:  
2 g/l



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Regulatory VOC (less water and  
exempt solvent) : 2 g/l

VOC Method 310 : 0.15 %



**Inventory Status:**

Australia AICS:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	One or more components in this product are not listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this



product are not listed on or exempt from the Inventory.

Ontario Inventory: One or more components in this product are not listed on or exempt from the Inventory.

Taiwan Chemical Substance Inventory: One or more components in this product are not listed on or exempt from the Inventory.

**16. Other information, including date of preparation or last revision**

**Revision Date:** 11/17/2022

**Version #:** 4.2

**Further Information:** No data available.

**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** POLYSEAL HS 1:1 PART B, POLYSEAL PART B  
**Product Code:** CPLK G002 000

### Recommended use and restriction on use

**Recommended use:** Coatings  
**Restrictions on use:** Not known.

### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY  
19218 REDWOOD ROAD  
CLEVELAND OH 44110  
US

**Contact person:** EH&S Department  
**Telephone:** 216-531-9222  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

Acute toxicity (Inhalation - dust and mist)	Category 4
Acute toxicity (Inhalation - vapor)	Category 1
Acute toxicity (Inhalation - dust and mist)	Category 2
Respiratory sensitizer	Category 1
Skin sensitizer	Category 1
Specific Target Organ Toxicity - Single Exposure	Category 3 <sup>1</sup>

#### Target Organs

- Respiratory tract irritation.

#### Unknown toxicity - Health

Acute toxicity, oral	0 %
Acute toxicity, dermal	0 %
Acute toxicity, inhalation, vapor	99.8 %
Acute toxicity, inhalation, dust or mist	0 %

#### Unknown toxicity - Environment

Acute hazards to the aquatic environment	100 %
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Chronic hazards to the aquatic environment 100 %

## Label Elements

### Hazard Symbol:



### Signal Word:

DangerDanger

### Hazard Statement:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
Harmful if inhaled.Fatal if inhaled.  
Harmful if inhaled.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
May cause respiratory irritation.

### Precautionary Statements

#### Prevention:

Do not breathe dust or mists. Use only outdoors or in a well-ventilated area. [In case of inadequate ventilation] wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. [In case of inadequate ventilation] wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

#### Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Immediately call a POISON CENTER or doctor/ physician. Specific treatment is urgent (see on this label). Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Immediately call a POISON CENTER/doctor. Specific treatment is urgent (see on this label). Wash contaminated clothing before reuse.

#### Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

#### Disposal:

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product



characteristics at time of disposal. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):** None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Homopolymer of HDI	28182-81-2	50 - <100%
Hexamethylene diisocyanate (HDI)	822-06-0	0.1 - <1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

#### Description of necessary first-aid measures

<b>Inhalation:</b>	Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.
<b>Skin Contact:</b>	If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.
<b>Eye contact:</b>	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.
<b>Ingestion:</b>	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
<b>Personal Protection for First-aid Responders:</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Most important symptoms/effects, acute and delayed

<b>Symptoms:</b>	Respiratory tract irritation.
<b>Hazards:</b>	No data available.

#### Indication of immediate medical attention and special treatment needed

<b>Treatment:</b>	Symptoms may be delayed.
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### 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for fire-fighters**

**Special fire-fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep upwind. Keep unauthorized personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

**Accidental release measures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Methods and material for containment and cleaning up:** Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

**7. Handling and storage****Handling**

**Technical measures (e.g. Local and general ventilation):** Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Safe handling advice:** Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Contact avoidance measures:** No data available.



**Hygiene measures:** Observe good industrial hygiene practices. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

### Storage

**Safe storage conditions:** Store away from incompatible materials. Store in original tightly closed container.

**Safe packaging materials:** No data available.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm	US. ACGIH Threshold Limit Values, as amended (2008)

Chemical name	Type	Exposure Limit Values	Source
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm 0.034 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	CEILING	0.01 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	CEV	0.02 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)

Chemical name	Type	Exposure Limit Values	Source
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
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	CEILING	0.01 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	CEV	0.02 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)

**Biological Limit Values**

Chemical Identity	Exposure Limit Values	Source
Hexamethylene diisocyanate (HDI) (Hexamethylenediamine (with hydrolysis): Sampling time: End of shift.)	15 µg/g (Creatinine in urine)	ACGIH BEI (03 2015)

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:** Wear goggles/face shield.

**Skin Protection**

**Hand Protection:** Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:** Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Hygiene measures:** Observe good industrial hygiene practices. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

**9. Physical and chemical properties****Appearance**

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Mild petroleum/solvent
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	Slower than Ether
<b>Flammability (solid, gas):</b>	No



**Upper/lower limit on flammability or explosive limits**

<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
<b>Relative density:</b>	1.12
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Practically Insoluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

**10. Stability and reactivity**

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	Alcohols. Amines. Strong acids. Strong bases. Water, moisture.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

**11. Toxicological information****Information on likely routes of exposure**

<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	Causes mild skin irritation. May cause an allergic skin reaction.
<b>Eye contact:</b>	Eye contact is possible and should be avoided.
<b>Ingestion:</b>	May be ingested by accident. Ingestion may cause irritation and malaise.

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.



**Eye contact:** No data available.

**Ingestion:** No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

##### Oral

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**  
Homopolymer of HDI LD 50 (Rat): > 5,000 mg/kg

Hexamethylene diisocyanate (HDI) LD 50 (Rat): 746 mg/kg

##### Dermal

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**  
Homopolymer of HDI LD 50 (Rabbit): > 15,800 mg/kg

Hexamethylene diisocyanate (HDI) LD 50 (Rat): > 7,000 mg/kg

##### Inhalation

**Product:** ATEmix: 0.12 mg/l  
ATEmix : 0.43 mg/l

#### Repeated dose toxicity

**Product:** No data available.

#### Skin Corrosion/Irritation

**Product:** No data available.

**Specified substance(s):**  
Homopolymer of HDI in vivo (Rabbit): Irritating , 24 - 72 h

Hexamethylene diisocyanate (HDI) in vivo (Rabbit): Corrosive , 4 - 72 h

#### Serious Eye Damage/Eye Irritation

**Product:** No data available.

**Specified substance(s):**  
Homopolymer of HDI Rabbit, 24 - 72 hrs: Not irritant

#### Respiratory or Skin Sensitization



**Product:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause sensitization by inhalation.

**Carcinogenicity**

**Product:** No data available.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogenic components identified

**Germ Cell Mutagenicity****In vitro**

**Product:** No data available.

**In vivo**

**Product:** No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Target Organs**

Specific Target Organ Toxicity - Single Exposure: Respiratory tract irritation.

**Aspiration Hazard**

**Product:** No data available.

**Other effects:** No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish**

**Product:** No data available.

**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**

Homopolymer of HDI EC 50 (Daphnia sp., 24 h): &gt;= 100 mg/l experimental result Experimental result, Supporting study

**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** No data available.**Specified substance(s):**

Homopolymer of HDI 1 % (28 d) Detected in water. Experimental result, Key study

Hexamethylene diisocyanate (HDI) 42 % (28 d) Detected in water. Experimental result, Key study

**BOD/COD Ratio****Product:** No data available.**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** No data available.**Specified substance(s):**

Hexamethylene diisocyanate (HDI) Bioconcentration Factor (BCF): 57.63 Aquatic sediment Estimated by calculation, Key study

**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.**Specified substance(s):**

Hexamethylene diisocyanate (HDI) Log Kow: 3.20

**Mobility in soil:**

No data available.



**Other adverse effects:** No data available.

### 13. Disposal considerations

**Disposal methods:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

### 14. Transport information

**TDG:**

Not Regulated

**CFR / DOT:**

Not Regulated

**IMDG:**

Not Regulated

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

### 15. Regulatory information

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

**Chemical Identity**

Hexamethylene diisocyanate (HDI)

**Reportable quantity**

100 lbs.



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

**Hazard categories**

- Immediate (Acute) Health Hazards
- Delayed (Chronic) Health Hazard
- Acute toxicity (any route or exposure)
- Respiratory or Skin Sensitization
- Specific target organ toxicity (single or repeated exposure)

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

Not regulated.

**US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting**

<u>Chemical Identity</u>	<u>% by weight</u>
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**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**VOC:** When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 2 g/l

Regulatory VOC (less water and exempt solvent) : 2 g/l

VOC Method 310 : 0.20 %

**Inventory Status:**

Australia AICS:	All components in this product are listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	All components in this product are listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	All components in this product are listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	All components in this product are listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this



product are not listed on or exempt from the Inventory.

Ontario Inventory:

One or more components in this product are not listed on or exempt from the Inventory.

Taiwan Chemical Substance Inventory:

One or more components in this product are not listed on or exempt from the Inventory.

**16. Other information, including date of preparation or last revision**

**Revision Date:** 11/17/2022

**Version #:** 4.2

**Further Information:** No data available.

**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.