

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

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

- 1.1 Product Code:** C521
Product Name: PermaStop
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant identified uses: Cooling System Repair
- 1.3 Details of the Supplier of the Safety Data Sheet:**
- | | | |
|--------------------------|---|---------------------------------------|
| Company Name: | CYCLO INDUSTRIES, INC.
902 SOUTH US HIGHWAY 1
JUPITER, FL 33477 USA | Phone Number:
(800)843-7813 |
| Web site address: | www.cyclo.com | |
| Email address: | ehs@cyclo.com | |
| Information: | First Aid Emergency (Outside U.S.) | (312)906-6194 |
- 1.4 Emergency telephone number:**
- | | | |
|---------------------------|-------------------------|---------------|
| Emergency Contact: | First Aid Emergency | (800)752-7869 |
| | CHEMTREC (703) 527-3887 | (800)424-9300 |

Section 2. Hazards Identification

- 2.1 Classification of the Substance or Mixture:**
Corrosive To Metals, Category 1
Acute Toxicity: Oral, Category 4
Serious Eye Damage/Eye Irritation, Category 1
Skin Sensitization, Category 1
Specific Target Organ Toxicity (single exposure), Category 3
Specific Target Organ Toxicity (repeated exposure), Category 1
- 2.2 Label Elements:**

**GHS Signal Word:** Danger**GHS Hazard Phrases:**

H290: May be corrosive to metals.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction
H318: Causes serious eye damage.
H335: May cause respiratory irritation.
H372: Causes damage to organs through prolonged or repeated exposure.

GHS Precaution Phrases:

P234: Keep only in original container.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.

GHS Response Phrases:

P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+352: IF ON SKIN: Wash with plenty of soap and water.



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P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

GHS Storage and Disposal Phrases:

P403+233: Store container tightly closed in well-ventilated place.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3 Adverse Human Health No data available.

Effects and Symptoms:

Section 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
7732-18-5	Water	60.0 -70.0 %	231-791-2 NA	No data available.
1344-09-8	Sodium silicate	25.0 -35.0 %	215-687-4 NA	Skin Corr. 2: H315 Eye Damage 2: H319 STOT (SE) 3: H335
9004-32-4	Cellulose, Carboxymethyl ether, sodium salt	0.0 -1.0 %	NA NA	No data available.
6440-58-0	2,4-Imidazolidinedione, 1,3-Bis(hydroxymethyl)-5,5-dimethyl-	0.0 -1.0 %	229-222-8 NA	Acute Tox.(O) 4: H302
7440-50-8	Copper	< 1.0 %	231-159-6 NA	Skin Sens. 1A: H317 STOT (SE) 1: H370 STOT (SE) 3: H335 H336

Section 4. First Aid Measures

4.1 Description of First Aid If inhaled, remove to fresh air. If in eyes, rinse cautiously with water for several minutes.

Measures: Remove contact lenses, if present and easy to do. Continue rinsing. Call physician immediately if adverse reaction occurs.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing No data available.

Media:

5.2 Flammable Properties No data available.

and Hazards:

No data available.

Flash Pt:

NP

Explosive Limits:

LEL: No data.

UEL: No data.

Autoignition Pt:

No data.

5.3 Fire Fighting

No data available.

Instructions:



Section 6. Accidental Release Measures

- 6.1 Protective Precautions, Protective Equipment and Emergency Procedures:** No data available.
- 6.2 Environmental Precautions:** No data available.
- 6.3 Methods and Material For Containment and Cleaning Up:** Use personal protective equipment. Avoid dust formation.

Section 7. Handling and Storage

- 7.1 Precautions To Be Taken in Handling:** Keep only in original container. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Keep out of the reach of children.
- 7.2 Precautions To Be Taken in Storing:** Store container tightly closed in well-ventilated place. Store locked up.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
7440-50-8	Copper	ACGIH TLV	TLV: 0.2 mg/m3 (fume) 1 mg/m3	
		France VL	TWA: 0.2 mg/m3 (Fume)	
		OSHA PELs	PEL: 0.1 (fume)/ 1.0	
		Britain EH40	TWA: 0.2 mg/m3 (Fume)	

8.2 Exposure Controls:

8.2.1 Engineering Controls (Ventilation etc.): Provide general dilute ventilation in the presence of dust.

8.2.2 Personal protection equipment:

Eye Protection: Safety glasses

Protective Gloves: Gloves

Other Protective Clothing: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron or full body suit will depend on the task. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly.

Respiratory Equipment (Specify Type): NIOSH approved dust respirator in the presence of dust formation.

Work/Hygienic/Maintenance Practices: Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.
No data available.



Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States: Gas Liquid Solid
Appearance and Odor: Semi-viscous; copper liquid.
pH: 10.5 - 11.5
Melting Point: No data.
Boiling Point: No data.
Flash Pt: NP
Evaporation Rate: > 1 (BuAC=1)
Flammability (solid, gas): No data available.
Explosive Limits: LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg): No data.
Vapor Density (vs. Air = 1): > 1
Specific Gravity (Water = 1): 1.08
Solubility in Water: Infinite
Octanol/Water Partition Coefficient: No data.
Autoignition Pt: No data.
Decomposition Temperature: No data.
Viscosity: No data.

9.2 Other Information

Percent Volatile: 0.0 % by weight.

Section 10. Stability and Reactivity

10.1 Reactivity: No data available.
10.2 Stability: Unstable Stable
10.3 Conditions To Avoid - Hazardous Reactions: No data available.
Possibility of Hazardous Reactions: Will occur Will not occur
10.4 Conditions To Avoid - Instability: No data available.
10.5 Incompatibility - Materials To Avoid: No data available.
10.6 Hazardous Decomposition or Byproducts: No data available.



Section 11. Toxicological Information

11.1 Information on Toxicological Effects: The International Agency for Research on Cancer has determined that crystalline silica (present in a subcomponent of this product in dust form) inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans. The National Toxicology Programs classifies respirable crystalline silica (present in a subcomponent of this product in dust form) as a known human carcinogen.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
7732-18-5	Water	n.a.	n.a.	n.a.	n.a.
1344-09-8	Sodium silicate	n.a.	n.a.	n.a.	n.a.
9004-32-4	Cellulose, Carboxymethyl ether, sodium salt	n.a.	n.a.	n.a.	n.a.
6440-58-0	2,4-Imidazolidinedione, 1,3-Bis(hydroxymethyl)-5,5-dimethyl-	n.a.	n.a.	n.a.	n.a.
7440-50-8	Copper	n.a.	n.a.	n.a.	n.a.

Section 12. Ecological Information

- 12.1 Toxicity:** No data available.
- 12.2 Persistence and Degradability:** No data available.
- 12.3 Bioaccumulative Potential:** No data available.
- 12.4 Mobility in Soil:** No data available.
- 12.5 Results of PBT and vPvB assessment:** No data available.
- 12.6 Other adverse effects:** No data available.

Section 13. Disposal Considerations

13.1 Waste Disposal Method: Dispose of contents/container in accordance with local/regional/national/international regulation.

Section 14. Transport Information

- 14.1 LAND TRANSPORT (European ADR/RID):**
 ADR/RID Shipping Name: Not-Regulated
 UN Number:
 Hazard Class:
- 14.2 MARINE TRANSPORT (IMDG/IMO):**
 IMDG/IMO Shipping Name: Not-Regulated
- 14.3 AIR TRANSPORT (ICAO/IATA):**
 ICAO/IATA Shipping Name: Not-Regulated

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7732-18-5	Water	No	No	No
1344-09-8	Sodium silicate	No	No	No
9004-32-4	Cellulose, Carboxymethyl ether, sodium salt	No	No	No
6440-58-0	2,4-Imidazolidinedione,	No	No	No



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1,3-Bis(hydroxymethyl)-5,5-dimethyl-

7440-50-8 Copper No Yes 5000 LB Yes-Cat. N100

CAS # Hazardous Components (Chemical Name)

Other US EPA or State Lists

7732-18-5	Water	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
1344-09-8	Sodium silicate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
9004-32-4	Cellulose, Carboxymethyl ether, sodium salt	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
6440-58-0	2,4-Imidazolidinedione, 1,3-Bis(hydroxymethyl)-5,5-dimethyl-	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
7440-50-8	Copper	CAA HAP,ODC: No; CWA NPDES: Yes; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: CMR, Part 5; NC TAP: No; NJ EHS: Yes - 0528; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: No; WI Air: Yes

CAS # Hazardous Components (Chemical Name)

International Regulatory Lists

7732-18-5	Water	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
1344-09-8	Sodium silicate	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
9004-32-4	Cellulose, Carboxymethyl ether, sodium salt	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
6440-58-0	2,4-Imidazolidinedione, 1,3-Bis(hydroxymethyl)-5,5-dimethyl-	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
7440-50-8	Copper	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes

European Community Hazard Symbol codes:

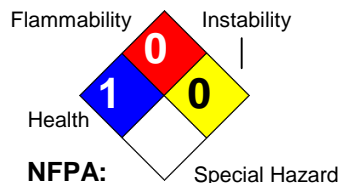
European Community Risk and Safety Phrases:

No data available.

Section 16. Other Information

Revision Date: 09/25/2017

Hazard Rating System:



Additional Information About No data available.

This Product:

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