

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Trade name : CPWE-(XXX)
 Product code : CPWE-(XXX)
 Other means of identification : CPWE-(XXX)/Q, CPWE-(XXX)/P, CPWE-(XXX)/5SF

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Protective Industrial Polymers
 7875 Bliss Parkway
 North Ridgeville, Ohio 44039 - USA-Ohio
 T 440-327-0015
www.protectpoly.com

1.4. Emergency telephone number

Emergency number : Chemtrec: 800-424-9300 (Outside USA) 703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation H315 Causes skin irritation
 Category 2

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Warning
 Hazard statements (GHS-US) : H315 - Causes skin irritation
 Precautionary statements (GHS-US) : P264 - Wash hands, forearms and face thoroughly after handling
 P280 - Wear protective clothing
 P302+P352 - If on skin: Wash with plenty of soap
 P321 - Specific treatment (see a doctor if symptoms do not go away. on this label)
 P332+P313 - If skin irritation occurs: Get medical advice/attention
 P362+P364 - Take off contaminated clothing and wash it before reuse

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Titanium Dioxide	(CAS No) 13463-67-7	0 - 86	Carc. 2, H351
Iron Oxide	(CAS No) 1309-37-1	0 - 75	Not classified
Carbon black	(CAS No) 1333-86-4	0 - 50	Carc. 2, H351
copper Compounds	(CAS No) 7440-50-8	0 - 35	Skin Irrit. 2, H315
Aluminium Hydroxide	(CAS No) 21645-51-2	0 - 4	Not classified

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Name	Product identifier	%	GHS-US classification
1-methyl-2-pyrrolidone	(CAS No) 872-50-4	0 - 3	Flam. Liq. 4, H227

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/injuries after skin contact : Irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Iron Oxide (1309-37-1)		
ACGIH	Local name	Iron oxide (Fe O)
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (Respirable fraction)
ACGIH	Remark (ACGIH)	Pneumoconiosis
OSHA	OSHA PEL (TWA) (mg/m ³)	10 mg/m ³
1-methyl-2-pyrrolidone (872-50-4)		
Not applicable		
Aluminium Hydroxide (21645-51-2)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (Respirable fraction)
Titanium Dioxide (13463-67-7)		
ACGIH	Local name	Titanium dioxide
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
ACGIH	Remark (ACGIH)	LRT irr; A3
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³
Carbon black (1333-86-4)		
ACGIH	Local name	Carbon black
ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³ (Inhalable fraction)
ACGIH	Remark (ACGIH)	Bronchitis
OSHA	OSHA PEL (TWA) (mg/m ³)	3.5 mg/m ³
copper Compounds (7440-50-8)		
ACGIH	ACGIH TWA (mg/m ³)	0.2 mg/m ³

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
 Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
 Appearance : Colored Liquid.
 Color : Colored
 Odor : There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure.
 Mixture contains one or more component(s) which have the following odour:
 Odourless Mild odour Amine-like odour Smell of fish
 Odor threshold : No data available
 pH : No data available

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Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Iron Oxide (1309-37-1)	
LD50 oral rat	> 10000 mg/kg body weight (Rat, Male, Experimental value)
1-methyl-2-pyrrolidone (872-50-4)	
LD50 oral rat	3914 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 4150 mg/kg bodyweight; Rat; Experimental value)
ATE US (oral)	3914 mg/kg body weight
ATE US (dermal)	7000 mg/kg body weight
Aluminium Hydroxide (21645-51-2)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value)
LC50 inhalation rat (mg/l)	> 2.3 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Read-across)
Titanium Dioxide (13463-67-7)	
LD50 oral rat	> 5000 mg/kg body weight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Female, Experimental value)

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Titanium Dioxide (13463-67-7)	
LC50 inhalation rat (mg/l)	> 6.82 mg/l (Other, 4 h, Rat, Male, Experimental value)
Carbon black (1333-86-4)	
LD50 oral rat	> 8000 mg/kg (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value)
LD50 dermal rabbit	> 3000 mg/kg (Rabbit, Literature study)
LC50 inhalation rat (mg/l)	> 4.6 mg/l air (4 h, Rat, Experimental value)

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Titanium Dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans
Carbon black (1333-86-4)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified

Specific target organ toxicity – repeated exposure	: Not classified
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Aspiration hazard	: Not classified
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Symptoms/injuries after skin contact	: Irritation.
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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Iron Oxide (1309-37-1)	
EC50 Daphnia 1	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)

1-methyl-2-pyrrolidone (872-50-4)	
LC50 fish 1	3048 mg/l (LC50; 96 h; Salmo gairdneri)
EC50 Daphnia 1	4897 mg/l (EC50; 48 h; Daphnia magna)
Threshold limit algae 1	> 500 mg/l (EC50)
Threshold limit algae 2	600.5 mg/l (EC50; DIN 38412-9; 72 h; Desmodesmus subspicatus; Static system; Fresh water; Experimental value)

Aluminium Hydroxide (21645-51-2)	
LC50 fish 1	> 10000 mg/l (96 h, Pisces, Literature study)
EC50 Daphnia 1	> 10000 mg/l (48 h, Daphnia magna, Literature study)

Titanium Dioxide (13463-67-7)	
LC50 fish 1	> 100 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)
ErC50 (algae)	61 mg/l (EPA 600/9-78-018, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value)

Carbon black (1333-86-4)	
LC50 fish 1	> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Literature study)
EC50 Daphnia 1	> 5600 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 24 h, Daphnia magna, Static system, Fresh water, Experimental value)

copper Compounds (7440-50-8)	
LC50 fish 1	200 µg/l (96 h, Salmo gairdneri, Flow-through system, Fresh water, Weight of evidence)

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copper Compounds (7440-50-8)	
EC50 Daphnia 1	109 - 798 µg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Weight of evidence)

12.2. Persistence and degradability

Iron Oxide (1309-37-1)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

1-methyl-2-pyrrolidone (872-50-4)	
Persistence and degradability	Readily biodegradable in water. Inherently biodegradable. Biodegradable in the soil. Highly mobile in soil. Photodegradation in the air.
Biochemical oxygen demand (BOD)	1.07 g O ₂ /g substance
Chemical oxygen demand (COD)	1.56 g O ₂ /g substance
ThOD	1.9 g O ₂ /g substance
BOD (% of ThOD)	0.56

Aluminium Hydroxide (21645-51-2)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable (inorganic)
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Titanium Dioxide (13463-67-7)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable (inorganic)
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Carbon black (1333-86-4)	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

copper Compounds (7440-50-8)	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Iron Oxide (1309-37-1)	
Bioaccumulative potential	No bioaccumulation data available.

1-methyl-2-pyrrolidone (872-50-4)	
Log Pow	-0.73 - -0.46 (Experimental value; Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Bioaccumulative potential	Not bioaccumulative.

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Aluminium Hydroxide (21645-51-2)	
Bioaccumulative potential	Not bioaccumulative.
Titanium Dioxide (13463-67-7)	
Bioaccumulative potential	Not bioaccumulative.
Carbon black (1333-86-4)	
Bioaccumulative potential	Not bioaccumulative.
copper Compounds (7440-50-8)	
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

Iron Oxide (1309-37-1)	
Surface tension	Not applicable (solid)
Ecology - soil	Adsorbs into the soil.
1-methyl-2-pyrrolidone (872-50-4)	
Surface tension	0.407 N/m
Log Koc	Koc,20.94; Calculated value; log Koc; 1.32; Calculated value
Aluminium Hydroxide (21645-51-2)	
Ecology - soil	No (test)data on mobility of the substance available.
Titanium Dioxide (13463-67-7)	
Ecology - soil	Low potential for mobility in soil.
Carbon black (1333-86-4)	
Ecology - soil	Adsorbs into the soil. Not toxic to plants. Not toxic to animals.
copper Compounds (7440-50-8)	
Ecology - soil	Adsorbs into the soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

TDG

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

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Listed on the United States TSCA (Toxic Substances Control Act) inventory

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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

1-methyl-2-pyrrolidone (872-50-4)

Subject to reporting requirements of United States SARA Section 313

copper Compounds (7440-50-8)

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ

5000 lb

15.2. International regulations

CANADA

No additional information available

Aluminium Hydroxide (21645-51-2)

Listed on the Canadian DSL (Domestic Substances List)

Titanium Dioxide (13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

Carbon black (1333-86-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Titanium Dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

Carbon black (1333-86-4)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

1-methyl-2-pyrrolidone (872-50-4)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)	Maximum Allowable Dose Limit (MADL)
No	Yes	No	No	3200	

Titanium Dioxide (13463-67-7)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)	Maximum Allowable Dose Limit (MADL)
Yes	No	No	No		

Carbon black (1333-86-4)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)	Maximum Allowable Dose Limit (MADL)
Yes	No	No	No		

Iron Oxide (1309-37-1)

U.S. - New Jersey - Right to Know Hazardous Substance List

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1-methyl-2-pyrrolidone (872-50-4)

U.S. - New Jersey - Right to Know Hazardous Substance List

Titanium Dioxide (13463-67-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

Carbon black (1333-86-4)

U.S. - New Jersey - Right to Know Hazardous Substance List

copper Compounds (7440-50-8)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information : Disclaimer: This SDS to the best of our knowledge conforms to the requirements of OSHA 20 CFR 1910.1200 and summarizes the health and safety hazard information and general guidance on how to safely handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace.

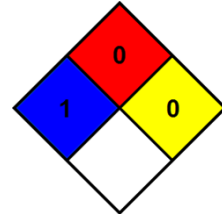
Full text of H-phrases:

H227	Combustible liquid
H315	Causes skin irritation
H351	Suspected of causing cancer

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product