SAFETY DATA SHEETS

This SDS packet was issued with item: 070843268

N/A



MATERIAL SAFETY DATA SHEET

Section 1 – Identification

Product Name: Patterson Zinc Cement Liquid Product Code: 070843268

Product Use: Restorative and Prosthodontic in Dentistry

Emergency Phone Numbers: 24-hour Emergency Response Number: 1-(800) 424-9300

Section 2 – Hazards Identification

- This information is based on findings from related or similar materials.
- H316 Causes mild skin irritation
- H320 Cause eye irritation
- Dust may cause irritation to nose, throat, and lungs, which will disappear in 24 hours
- This product may contain particulate, not otherwise classified (Nuisance Dust).
- H400 Very toxic to aquatic life
- No known OSHA hazards

Potential Health Effects, Signs and Symptoms of Exposure:

Primary Route of Entry	Inhalation, skin, and ingestion.
Eye	Causes eye irritation
Skin	Repeated or prolonged exposure may cause allergic skin rashes.
Ingestion	Higher concentration can irritate respiratory system
Inhalation	Inhalation of high levels of zinc oxide may result in tightness of chest, metallic taste, coughing,
	dizziness, fever, chills, headache, nausea, and dry throat. Over exposure may produce symptoms
	known as metal fume fever or (zinc shakes); an acute, self limiting condition without recognized
	complications. Symptoms of metal fume fever include chills, fever, muscular pain, nausea, and
	vomiting. Like any finely divided particulate matter, may cause mechanical irritation to skin and eyes.
Sub-Chronic Effects	Chronic exposure may cause respiratory tract irritation with nasopharyngities and laryngitis.

NOTE: Refer to Section 11, Toxicological Information for Details

Section 3 – Composition/Information on Ingredients

Chemical Identity	CAS Numbers	EINECS#	INCI Name	Exposure OSHA	Limits ACGIH	Carcinogen	%
				TWA/STEL	TWA/STEL	IARC/NTP/OSH A	
Zinc Oxide	1314-13-2	215-222-5	Zinc Oxide	TWA = 15 mg / m^3	N/E	Not Listed	>99.9

 N/E - None
 N/DA - No Data Available

 Established
 N/A - Not Applicable

 N/R - Not Reviewed
 N/A - Not Applicable

(items in parenthesis relate to 1999/45/EC)

Zinc Oxide: Danger Symbol – GHS09 (N) Hazard Statement: H400 (R50/53)

Precautionary Statement: P501 (S60), P273 (S61)

See Section 16 for Hazard and Precautionary Statement Key. Section 4 – First Aid Measures

First Aid for Eye	Immediately flush eyes with plenty of water for at least 15 min. occasionally lifting the upper and lower lids. Get medical help if discomfort persists
First Aid for Skin	Flush skin with plenty of soap and water for at least 15 min. while removing contaminated clothing and shoes. Get medical help if discomfort persists.
First Aid for Ingestion	Remove to fresh air. Get medical help if discomfort persists.
First Aid for Inhalation	Remove from exposure to fresh air immediately. Get medical help if discomfort persists.

Manufacturer: Patterson Companies, Inc. 1031 Mendota Heights Road St. Paul, MN 55120 Tel: 1-800 328-5536

Fax: 1-651 686-9331 www.pattersoncompanies.com

Section 5 – Fire Fighting Measures

Flash Po	int (°F/°C)	Flammable Limit (vol%)	Auto-ignition Temperature (vol%)	
N	[/A	N/A	N/A	
Method: Extinguishing Mec Fire Fighting Instructions: Unusual Hazards:	lia: In case of fire Non-combust Substance is	e use water spray, dry chemical, carbon d ible noncombustible.	ioxide or foam.	
Section 6 – Acci	dental Release M	leasures		
Spill or Release Procedures	Shovel or vacuum up s bodies of water or soil	spilled product and place in closed container f	for disposal. Do not flush into sewer, stream, or other	
Section 7 – Han	dling and Storag	8		
Handling Storage Explosion Hazard	Limit all unnecessar without creating dus environment. Store in a cool, dry p None.	y personal contact. Use appropriate PPE t. Sweep up and shovel. Keep in suitabl blace.	when handling. Pick up and arrange disposal e, closed containers. Prevent leakage into the	
Section 8 – Exp	osure Controls / 1	Personal Protection		
Engineering Controls	Mechanical ventilat	on preferred to keep dust levels down.		
Personal Protective	e Equipment			
General	To identify addition hazard assessment EN166 be conducted	nal Personal Protective Equipment (PP in accordance with the OSHA PPE St ed before using this product.	PE) requirements, it is recommended that a tandard (29CFR1910.132), or European Standard	
Eye/ Face Protection	Use safety eyewear	for protection against airborne particulate	».	
Skin Protection	Use impermeable clothing to prevent any contact with this product, such as gloves, apron, boots, or whole body suit. Recommended to prevent skin irritation in hypersensitive individuals.			
Respiratory Protection	In case of insufficien	nt ventilation or extremely dusty environ	ments, wear suitable respiratory equipment.	

Section 9 – Physical and Chemical Properties

Appeara White Pov	nce vder	Odor & (Ddor Threshold None	<mark>р</mark> Н N/A	Spec	ific Gravity 5.6	Viscosity N/A	% V N	olatile //A
Boiling Point/ Freezing Point	Decomposi Temperat	ion Octanol/Wat Partitioning Coef Log Po/w		ent Press	por sure:	Vapor Density	Evaporation Rate	Ignition	Solubility In Water (20°C)
N/A	N/DA	N/DA		N	'A	N/A	N/A	N/A	N/A
Flash Point (°F/°C) N/A		Flamma	able Limit N/A	(vol%)		Auto-ignition T	emperature N/A	e (vol%)	

Section 10 – Stability and Reactivity

Stability:	Incompatibility (Materials to Avoid):
Stable	Acids / Strong Oxidizers
Hazardous Decomposition Products:	Hazardous Polymerization:
None	Will not occur
Conditions to Avoid: Exposure to moisture of	r water.

Section 11 – Toxicological Information

Acute Oral Toxicity	Acute Dermal Toxicity	Acute Inhalation Toxicity	Irritation – skin	Irritation – Eye	
N/DA	N/DA	N/DA	N/DA	N/ DA	
Sensitization		Mutagenicity	Sub-c	Sub-chronic Toxicity	
N/DA		N/DA		Ν/ DΔ	

Section 12 – Ecological Information

Ecotoxicological Information - very toxic to aquatic life.

Acute Toxicity to Fish	Acute Toxicity to Invertebrates	Acute Toxicity to Algae	Bioconcentration	Toxicity to Sewage Bacteria
N/DA	N/ DA	N/ DA	N/ DA	N/ DA

Chemical Fate Information

Biodegradability	N/DA. This material is not expected to bioaccumulate.
Chemical Oxygen Demand	N/ DA
Chemical Oxygen Demand	N/ DA

Section 13 – Disposal Considerations

Dispose of in compliance with governmental regulation (state and federal).

Dispose of container and unused contents in accordance with federal, state and local requirements. For EU Member States, please refer to any relevant Community provisions relating to waste. In their absence, it is useful to remind the user that national or regional provisions may be in force.

Section 14 – Transport Information

DOT (49 CFR 172)	
Proper Shipping Name:	Non-regulated
Identification Number:	N/A
Marine Pollutant:	N/A
Special Provisions:	N/A
Emergency Response Guidebook (ERG) #:	
IATA (DGR):	
Proper Shipping Name:	UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Zinc Oxide), 9, III
Class or Division:	9
UN or ID Number:	UN3077
Packaging Instructions:	III
Emergency Response Guidance (ICAO)#:	
IMO (IMDG):	
Proper Shipping Name:	UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Zinc Oxide), 9, III
Class or Division:	9
UN or ID Number:	UN3077
Special Provisions & Stowage/Segregation:	N/A
Emergency Schedule (EmS)#:	N/A
Other Information:	N/A

Section 15 – Regulatory Information

US Federal Regulations

Clean Air Act: HAP/ODS	This product contains the following HAP's or ODS:
	• NONE
Clean Water Act: Priority	This product contains the following chemicals listed under the U.S. Clean Water Act
Pollutant	Priority Pollutant and Hazardous Substance List:
	• None
FDA: Food Packaging Status	This product has not been cleared by the FDA for use in food packaging and / or other
	applications as an indirect food-packaging additive.

Occupational Safety and Health	This product is considered to be hazardous under the OSHA Hazard Communication
Act	Standard. It's hazards are: None.
RCRA	This product contains the following chemicals considered to be hazardous waste under
	RCRA (40 CFR 261).
	• None
SARA Title III: Section 302 (RQ)	This product contains no chemicals regulated under Section 302 as extremely hazardous
	substances.
SARA Title III: Section 302	This product contains chemicals regulated under Section 304 as extremely hazardous
(TPQ)	chemicals for emergency release notification ("CERCLA" List):
	• None
SARA Title III: Section 311-312:	This product is considered to be hazardous under the OSHA Hazard Communication
	Standard and is regulated under Section 311-312 (40 CFR 370). It's hazards are: None
SARA Title III: Section 313:	This product contains the following chemicals which are subject to the reporting
	requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization
	Act of 1986 and 40 CFR Part 372: Zinc Oxide - CAS # 1314-13-2
TSCA Section 8(b): Inventory:	This product does contain chemicals listed on the TSCA inventory or otherwise complies
	with TSCA pre-manufacture notification requirements.
	• Zinc Oxide – CAS # 1314-13-2
TSCA Significant New Use Rule:	None of the chemicals in this material have a SNUR under TSCA.

State Regulations

CA Right-to-Know Law:	None
California No Significant Risk	
Rule:	None
MA Right-to-Know Law:	Zinc Oxide – CAS # 1314-13-2
NJ Right-to-Know Law:	Zinc Oxide – CAS # 1314-13-2
PA Right-to-Know Law:	Zinc Oxide – CAS # 1314-13-2
FL Right-to-Know Law:	None
MN Right-to-Know Law:	Zinc Oxide – CAS # 1314-13-2

International Regulations

CDSL: Canadian Inventory	Zinc Oxide – CAS # 1314-13-2	
(on Canadian Transitional List)	Not controlled under WHMIS.	
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Labeling according to EC directives - 1272/2008 {CLP} and 1999/45/EC (items in parenthesis relate to 1999/45/EC)

European Community:	For Zinc Oxide USP (finished product):	
	 DANGER SYMBOLS: GHS09 (N) – Dangerous to the environment HAZARD STATEMENT: H316 (N/A), H320 (N/A), H400 (R50) PRECAUTIONARY STATEMENT: P102 (S2), Keep out of reach of children. P261 (S24), Avoid breathing dust/fume/gas mist/vapor sprays. P280 (S36/37/39), Wear protective gloves/clothing/eye protection/face protection. P309+314 (S45), If exposed or you feel unwell, get medical advice/attention. P273 (S61), Avoid release into environment. 	

Section 16 – Other Information

EU Classes and Risk / Safety Phrases for Referenced Ingredients (See Section 2):

(items in parenthesis relate to 1999/45/EC)

Danger Symbols:

GHS09 (N) – Dangerous to the Environment.

Hazard Statement:

H400 (R50/53), Very toxic to Marine life, may cause long term effects. H316 (N/A), Causes mild skin irritation. H320 (N/A), Causes eye irritation.

Date of Issue: 05/01/13

Precautionary Statement:

P102 (S2), Keep out of reach of children. P261 (S24), Avoid breathing dust/fume/gas mist/vapor sprays. P280 (S36/37/39), Wear protective gloves/clothing/eye protection/face protection. P309+314 (S45), If exposed or you feel unwell, get medical advice/attention. P273 (S61), Avoid release into environment.



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According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

SECTION 1: Identification

Product identifier

Product name: Zinc Cement-Liquid Product code: 070843268

Recommended use of the product and restriction on use Relevant identified uses: Not determined or not applicable.

Uses advised against: Not determined or not applicable. **Reasons why uses advised against:** Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: Supplier Patterson Companies, Inc. 1031 Mendota Heights Road St. Paul, MN 55120 1-800-328-5536 Fax:1-651-686-9331

Emergency telephone number: United States CHEMTREC

Within USA and Canada: 1-800-424-9300 (CHEMTREC, 24 hours) Outside USA and Canada: +1-703-527-3887 (CHEMTREC, 24 hours)

SECTION 2: Hazard(s) identification

GHS classification: Not a hazardous substance or mixture Label elements

Hazard pictograms: None

Signal word: None

Hazard statements: None Precautionary statements: None Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7664-38-2	Phosphoric acid, solution	50-75

Additional Information: None

SECTION 4: First aid measures	
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Page 1 of 8

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Get medical advice/attention if you feel unwell

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention

After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Not determined or not applicable.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

Environmental precautions:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Absorb with non-combustible liquid-binding material (sand, diatomaceus earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed. Protect from freezing and physical damage. Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
United States (OSHA)	Phosphoric acid, solution	7664-38-2	OSHA PEL TWA 1.0 mg/m ³
	Phosphoric acid, solution	7664-38-2	STEL: 3 mg/m ³
ACGIH	Phosphoric acid, solution	7664-38-2	ACGIH TLV TWA 1.0 mg/m ³
	Phosphoric acid, solution	7664-38-2	ACGIH TLV STEL 3.0 mg/m ³
NIOSH	Phosphoric acid, solution	7664-38-2	NIOSH REL TWA 1.0 mg/m ³
	Phosphoric acid, solution	7664-38-2	NIOSH REL ST 3.0 mg/m ³
	Phosphoric acid, solution	7664-38-2	IDLH: 1000 mg/m ³

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

Select glove material impermeable and resistant to the substance. Wear appropriate clothing to prevent any possibility of skin contact.

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.

General hygienic measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work. Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Liquid
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
рН	< 1.5
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	100 mPa·s (100 cP)
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Phosphoric acid, solution	Causes severe skin burns and eye damage.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

Page 6 of 8

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available. Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available. **Substance data:** No data available.

Bioaccumulative potential

Product data: No data available. **Substance data:** No data available.

Mobility in soil

Product data: No data available. Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN 1805
UN proper shipping name	Phosphoric acid solution
UN transport hazard class(es)	None
Packing group	III
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN 1805

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

UN proper shipping name	Phosphoric acid solution
UN transport hazard class(es)	None
Packing group	
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN 1805
UN proper shipping name	Phosphoric acid solution
UN transport hazard class(es)	None
Packing group	III
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

7664-38-2	Phosphoric acid, solution

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals: Not determined.

CERCLA:

7664-38-2Phosphoric acid, solutionList	isted	5,000
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RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

	7664-38-2	Phosphoric acid, solution	Listed	
Ne	New Jersey Right to Know:			
	7664-38-2	Phosphoric acid, solution	Listed	
New York Right to Know:				
	7664-38-2	Phosphoric acid, solution	Listed	
Pennsylvania Right to Know:				
	7664-38-2	Phosphoric acid, solution	Listed	
Cal	California Proposition 65: None of the ingredients are listed			

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in

Listed

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Page 8 of 8

Zinc Cement-Liquid

this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-0-0

HMIS: 3-0-0

Initial preparation date: 11.21.2017

End of Safety Data Sheet



According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

SECTION 1: Identification

Product identifier

Product name: Zinc Cement-Liquid Product code: 070843268

Recommended use of the product and restriction on use Relevant identified uses: Not determined or not applicable.

Uses advised against: Not determined or not applicable. **Reasons why uses advised against:** Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: Supplier Patterson Companies, Inc. 1031 Mendota Heights Road St. Paul, MN 55120 1-800-328-5536 Fax:1-651-686-9331

Emergency telephone number: United States CHEMTREC

Within USA and Canada: 1-800-424-9300 (CHEMTREC, 24 hours) Outside USA and Canada: +1-703-527-3887 (CHEMTREC, 24 hours)

SECTION 2: Hazard(s) identification

GHS classification: Not a hazardous substance or mixture Label elements

Hazard pictograms: None

Signal word: None

Hazard statements: None Precautionary statements: None Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7664-38-2	Phosphoric acid, solution	50-75

Additional Information: None

SECTION 4: First aid measures	
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Page 1 of 8

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Get medical advice/attention if you feel unwell

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention

After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Not determined or not applicable.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

Environmental precautions:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Absorb with non-combustible liquid-binding material (sand, diatomaceus earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed. Protect from freezing and physical damage. Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
United States (OSHA)	Phosphoric acid, solution	7664-38-2	OSHA PEL TWA 1.0 mg/m ³
	Phosphoric acid, solution	7664-38-2	STEL: 3 mg/m ³
ACGIH	Phosphoric acid, solution	7664-38-2	ACGIH TLV TWA 1.0 mg/m ³
	Phosphoric acid, solution	7664-38-2	ACGIH TLV STEL 3.0 mg/m ³
NIOSH	Phosphoric acid, solution	7664-38-2	NIOSH REL TWA 1.0 mg/m ³
	Phosphoric acid, solution	7664-38-2	NIOSH REL ST 3.0 mg/m ³
	Phosphoric acid, solution	7664-38-2	IDLH: 1000 mg/m ³

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

Select glove material impermeable and resistant to the substance. Wear appropriate clothing to prevent any possibility of skin contact.

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.

General hygienic measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work. Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Liquid
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
рН	< 1.5
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	100 mPa·s (100 cP)
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Phosphoric acid, solution	Causes severe skin burns and eye damage.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

Specific target organ toxicity (single exposure)
Assessment: Based on available data, the classification criteria are not met.
Product data:
No data available.
Substance data: No data available.
Specific target organ toxicity (repeated exposure)
Assessment: Based on available data, the classification criteria are not met.
Product data:
No data available.
Substance data: No data available.
Aspiration toxicity
Assessment: Based on available data, the classification criteria are not met.
Product data:
No data available.
Substance data: No data available.
Information on likely routes of exposure:
No data available.
Symptoms related to the physical, chemical and toxicological characteristics:
No data available.
Other information:
No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met. Product data: No data available. Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available. **Substance data:** No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available. **Substance data:** No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

Page 6 of 8

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN 1805
UN proper shipping name	Phosphoric acid solution
UN transport hazard class(es)	None
Packing group	III
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN 1805
UN proper shipping name	Phosphoric acid solution
UN transport hazard class(es)	None
Packing group	III
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN 1805
UN proper shipping name	Phosphoric acid solution
UN transport hazard class(es)	None
Packing group	III
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):								
	7664-38-2	Phosphoric acid, solution		Listed				
Significant New Use Rule (TSCA Section 5): Not determined.								
Export notification under TSCA Section 12(b): Not determined.								
SARA Section 302 extremely hazardous substances: Not determined.								
SARA Section 313 toxic chemicals:								
	7664-38-2 Phosphoric acid, solution			Not Listed				
CERCLA:								
	7664-38-2	Phosphoric acid, solution	Listed	5,000				
RCRA: Not determined.								
Section 112(r) of the Clean Air Act (CAA): Not determined.								
Massachusetts Right to Know:								
	7664-38-2	Phosphoric acid, solution		Listed				
New Jersey Right to Know:								
	7664-38-2	Phosphoric acid, solution		Listed				

New York Right to Know:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.21.2017

Zinc Cement-Liquid

	7664-38-2	Phosphoric acid, solution	Listed		
Pennsylvania Right to Know:					
	7664-38-2	Phosphoric acid, solution	Listed		
California Proposition 65: None of the ingredients are listed					

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-0-0

HMIS: 3-0-0

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End of Safety Data Sheet

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Page 8 of 8