



SAFETY DATA SHEET

NAME OF PRODUCT: ZINC PHOSPHATE CEMENT Liquid

FILE NO.: SDS08

SDS DATE: 06/19/2014

SECTION 1: IDENTIFICATION

PRODUCT NAME: ZINC PHOSPHATE CEMENT Liquid
PRODUCT CODES: 092107, 092108
IDENTIFIED USES: Dentistry
USES ADVISED AGAINST: Non-dental use
MANUFACTURER: Harry J. Bosworth Company
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SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Corrosive to metals (Category 1)
Skin corrosion (Category 1B)
Serious eye damage (Category 1)
LABELING: FDA regulated device - exempt from Regulation (US) 29 CFR 1910.1200.

PICTOGRAM:



SIGNAL WORD: Danger

HAZARD STATEMENTS: H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

PRECAUTIONARY STATEMENTS: P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P234 Keep only in original container.
P235+P410 Keep cool. Protect from sunlight.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 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.
P321 Specific treatment (see supplemental first aid instructions on this label).
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.
P402 Store in a dry place.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container to an approved waste disposal plant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	%WT	OSHA PEL - TWA	ACGIH TLV - TWA	CLASSIFICATION
Phosphoric Acid	7664-38-2	30-40	1 mg/m ³	1 mg/m ³	Met. Corr. 1; Skin Corr. 1B; Eye Dam. 1; H290, H314

For full text of H-statements mentioned in this section, see section 16.

SECTION 4: FIRST-AID MEASURES

INHALATION: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
SKIN: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

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EYE: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of phosphorus.

SPECIAL HAZARDS: Phosphoric acid can react with metals to liberate hydrogen, a flammable gas. Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine.

ADVICE FOR FIREFIGHTERS: Fight fires from safe distance or protected areas. Cool containers of material exposed to heat with cold water spray. Wear self contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

ENVIRONMENTAL PRECAUTIONS: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

CONTAINMENT AND CLEANUP: Soak up with inert absorbent material. Place in suitable, closed container for disposal according to official regulations.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Product is intended for dental use only. Handling of this product should be by trained dental healthcare professionals only. Observe normal care for working with chemicals. Avoid contact with the eyes, skin and clothing. Avoid inhalation of vapor or mist. Keep away from foodstuffs, beverages and animal feed.

CONDITIONS FOR SAFE STORAGE: Store only in the original package. Keep container tightly sealed in a dry and well-ventilated place. Protect from heat and direct sunlight. Store away from food and beverages.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Handle in accordance with good industrial hygiene and safety practice. Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits. Local exhaust ventilation is preferred since it prevents contamination dispersion into the work area by controlling it at its source. Provide eyewash and safety shower if contact or splash hazard exists. Wash hands before breaks and at the end of work.

EYE/FACE PROTECTION: Safety glasses.

SKIN PROTECTION: Glove material impermeable and resistant to the product.

BODY PROTECTION: Protective work clothing.

RESPIRATORY PROTECTION: NIOSH (US) or CEN (EU) approved respirators and components.

ENVIRONMENTAL EXPOSURE: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/COLOR: Clear, colorless liquid

ODOR: None

pH: Approximately 1

BOILING POINT: 275°F (135°C)

VAPOR PRESSURE: 1.5 mmHg at 68°F (20°C)

RELATIVE DENSITY (H₂O=1.0): 1.6 g/cm³

WATER SOLUBILITY: Soluble

VISCOSITY: 100 cP

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions.

HAZARDOUS REACTIONS: Phosphoric acid can react with metals to liberate hydrogen, a flammable gas. Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine.

CONDITIONS TO AVOID: Heat. Extremes of temperature and direct sunlight.

INCOMPATIBLE MATERIALS: Strong bases, powdered metals.

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SECTION 11: TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS: **EYES:** CORROSIVE. Contact causes severe burns with redness, swelling, pain and blurred vision. Permanent damage including blindness can result.
SKIN: CORROSIVE. Contact can cause pain, redness, burns, and blistering. Permanent scarring can result. A severe exposure can cause death. At low concentrations: Can cause dry, red, cracked skin (dermatitis).
INGESTION: CORROSIVE. Can burn the lips, tongue, throat and stomach. Symptoms may include nausea, vomiting, stomach cramps and diarrhea. Permanent damage can result.
INHALATION: Not expected to be an inhalation hazard unless heated or misted. Can irritate the nose and throat.

CARCINOGENICITY: **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or possible carcinogen by OSHA.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

SECTION 12: ECOLOGICAL INFORMATION

ADVERSE EFFECTS: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: DISPOSAL CONSIDERATIONS

PRODUCT: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Disposal must be made according to official regulations.

CONTAMINATED PACKAGING: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER: UN1805
PROPER SHIPPING NAME: Phosphoric acid solution
HAZARD CLASS: 8
PACKING GROUP: III
LABEL STATEMENT: Corrosive

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

TSCA: This product is an FDA regulated device and not subject to TSCA regulations.
CERCLA: This product is an FDA regulated device and not subject to reporting requirements. There may be specific reporting requirements at the local, regional, or state level.
SARA 313 TOXIC CHEMICALS: The following components are subject to reporting levels established by SARA Title III, Section 313 (40 CFR 372): *None*.
SARA 311/312 HAZARDS: This product is an FDA regulated device and not subject to reporting requirements.

INTERNATIONAL REGULATIONS

CANADIAN ENVIRONMENTAL PROTECTION ACT: This product is a medical device and not subject to chemical notification requirements.
EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): This product is a medical device and not subject to chemical notification requirements.

SECTION 16: OTHER INFORMATION

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FULL TEXT OF H STATEMENTS REFERRED TO UNDER SECTION 3

Eye Dam.	Serious eye damage
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
Met. Corr.	Corrosive to metals
Skin Corr.	Skin corrosion

NFPA RATING

Health Hazard	3
Fire Hazard	0
Reactivity Hazard	0

PREPARATION INFORMATION: This SDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product.

DISCLAIMER: To the best of our knowledge, the information contained herein is accurate. However, The Harry J. Bosworth Company does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.