

MATERIAL SAFETY DATA SHEET

SECTION I - Product / Company Identification

Product Trade Name: **ZINC PHOSPHATE CEMENT - POWDER**
Part (Item) Number: 305-0201-001, 305-0301-001, 305-0401-001,305-0801-001
Manufacturer: DENTAL TECHNOLOGIES, INC.
Address: 6901 N. HAMLIN AVENUE
City, State, Zip: LINCOLNWOOD, IL. 60712 U.S.A.
Emergency Telephone Number: (800) 424-9300 / (703) 527-3887 (Chemtrec)
Information Telephone Number: (800) 835-0885 / (847) 677-5500
Date Revised: 11-Oct-2006 Rev. No. 002

SECTION II - Hazardous Ingredients/Identity Information

Hazardous Components:	Concentration	CAS NO.	HAZ CODE	RISK CODE
Zinc oxide		1314-13-2	N	R 50, R 53
Magnesium oxide		1309-48-4		

SECTION III - Hazards Identification

HAZARD CLASSIFICATION N Dangerous to the environment

SECTION IV - First Aid Measures

Skin: Not an irritant
Ingestion: Induce vomiting. Seek medical attention
Inhalation: Remove to fresh air. If breathing becomes difficult, contact a physician.
Eyes: Flush with plenty of water. Seek immediate medical attention by an Ophthalmologist.

SECTION V - Fire-fighting Measures.

Suitable extinguishing media: NA
Forbidden extinguishing media: None.
Special firefighting measures: No special measures required

SECTION VI - Accidental Release Measures

Personal precautions: Follow some precautions of Section VII and personal protection in Section VIII
Environmental precautions: Keep spilled material out of sewers.
Reclaiming methods: Pick up spilled material mechanically

SECTION VII - Handling and Storage

Handling: No special measures required
Storage: Room temperature.
Incompatibilities: No further data
Containers: Store in original containers.
Other precautions: Use by trained professionals only and according to directions.

SECTION VIII - Exposure Controls / Personal Protection

General measures: Local exhaust or general ventilation that will reduce airborne dust to less than permissible exposure limits. Ventilation should not be directed to the work area to control airborne dust particulates. Local exhaust system is recommended over general ventilation system as it can control the emissions of the contaminants at its source, preventing dispersion into the general work area.

Exposure limits:		OSHA-PEL	ACGIH-TLV
Zinc Oxide	Total Dust	15 mg/m ³	10 mg/m ³
	Respirable dust	5 mg/m ³	5 mg/m ³
Magnesium Oxide	Total Dust	15 mg/m ³	10 mg/m ³

General protective measures: Follow the usual precautionary measures for handling chemicals and good personal hygiene practice.

Respiratory protection: Normally none required. If handling material for extended periods of time with dust conditions, wear NIOSH/MSHA-approved type respirator.

Eye protection: Safety glasses or goggles.

Hands protection: Normally none required. If handling material for extended periods of time use of impervious gloves is recommended.

Skin protection: Light weight protective clothing

Other equipment: Lab coat over clothing recommended.

SECTION IX - Physical and Chemical Properties

Appearance:	Powder	Explosion limits:	Not an explosion hazard
Color	White to yellowish	Water solubility:	Insoluble
Odor	None	Evaporation rate:	Not determined
Boiling point:	Not determined	Density	Not determined
Flash point	Not applicable		

SECTION X - Stability and Reactivity

Stability:	Stable if stored as directed.
Conditions to avoid	None
Materials to avoid	None known
Hazardous decomposition products:	None
Hazardous polymerization products:	Will not occur

SECTION XI - Toxicological Information

Ingestion:	Inhalation of dust may be an irritant to pre-existing respiratory conditions.
Eye contact:	Like any fine particulate matter, may cause mechanical irritation to eyes.
Skin contact:	Like any fine particulate matter, may cause mechanical irritation to skin.
Inhalation:	Inhalation of dust may be an irritant to pre-existing respiratory conditions.
Prolonged exposure:	Not established.

SECTION XII - Ecological Information

Toxic to fish and other aquatic organisms
Avoid releasing the product into environment, ground water and sewage system.

SECTION XIII - Disposal Considerations

Do not dispose together with household garbage. Do not allow product to reach sewage system.
Dispose in accordance with Federal, State and local environmental regulations.

SECTION XIV - Transport Information

DOT Hazard Class: Not listed UN No.: No applicable information found

SECTION XV - Regulatory Information

CLASSIFICATION IN ACCORDANCE WITH EEC DIRECTIVES.

Hazard Classification Symbol:	N	Dangerous fo the environment
Risk statements	R 50	Toxic to aquatic organisms
	R 53	May cause long-term adverse effects in the aquatic environment
Safety Statements	S22	Do not breath dust

SECTION XVI - Other Information

	NFPA Hazard Classification:	HMIS Hazard Classification:
Health	0	0
Flammability	0	0
Reactivity	0	0
Specific Hazard / PPE	N/A	N/A

NFPA - National Fire Protection Association
N/A - Not Applicable
N/E - Not Established

CAUTION: PRODUCT FOR PROFESSIONAL USE ONLY.

The above information is based on presently available data and to our best knowledge for handling the product under normal conditions. Any use of this product in any way not indicated on this document or using it together with any other process/procedure will be exclusively under the user's responsibility.

MATERIAL SAFETY DATA SHEET

SECTION I - Product / Company Identification

Product Trade Name: **ZINC PHOSPHATE CEMENT - LIQUID**
Part (Item) Number: 305-0101-001
Manufacturer: DENTAL TECHNOLOGIES, INC.
Address: 6901 N. HAMLIN AVENUE

City, State, Zip: LINCOLNWOOD, IL. 60712 U.S.A.
Emergency Telephone Number: (800) 424-9300 / (703) 527-3887 (Chemtrec)
Information Telephone Number: (800) 835-0885 / (847) 677-5500
Date Revised: 13-Oct-2006 Rev. No. 002

SECTION II - Hazardous Ingredients/Identity Information

Hazardous Components:	Concentration	CAS NO.	HAZARD CODE	RISK CODE
Phosphoric acid		[7664-38-2]	C	R21, R22, R34

SECTION III - Hazards Identification

HAZARD CLASSIFICATION **C - Corrosive**

SECTION IV - First Aid Measures

Skin: Immediately wash the affected skin with plenty of water and soap while removing contaminated clothing and shoes. Rinse thoroughly. Wash clothing before reuse.

Ingestion: Do not induce vomiting. Drink plenty of water. Seek medical help immediately.

Inhalation: Inhalation is not an expected hazard..

Eyes: Wash open eye with running water for 15 minutes. Seek immediate medical attention by an Ophthalmologist.

SECTION V - Fire-fighting Measures.

Suitable extinguishing media: Carbon dioxide, water spray,
Unsuitable extinguishing media: Water with strong full jet (not sprayed) can move and spread the material.
Special firefighting measures: No special measures required

SECTION VI - Accidental Release Measures

Personal precautions: See handling precautions of Section VII and personal protection in Section VIII
Environmental precautions: Keep spilled material out of sewers.
Reclaiming methods: Absorb with liquid absorbent material such as sand, sawdust, acid binders, diatomite, etc. Neutralize acid before disposal as hazardous waste.

SECTION VII - Handling and Storage

Handling: Follow normal procedures for handling chemicals.
Storage: Room temperature.
Incompatibilities No further data
Containers: Store in original containers, keep all containers tightly closed.
Other precautions: Use by trained professionals only and according to directions.

SECTION VIII - Exposure Controls / Personal Protection

Exposure limits:	OSHA-PEL		ACGIH-TLV	
	TWA	STEL	TWA	STEL
Phosphoric acid	1 mg / m ³	3 mg / m ³	1 mg / m ³	3 mg / m ³
General ventilation:	Local or general exhaust system is recommended to keep personnel exposures below the exposure limits.			
General protective measures:	Follow the usual precautionary measures for handling chemicals and exercise good personal hygiene practice. Avoid contact with skin and eyes.			
Respiratory protection:	None required in normal use.			
Eye protection:	Use safety glasses or goggles.			
Hands protection:	Use of non-permeable gloves is recommended			
Skin protection:	Light weight protective clothing			
Other equipment:	Lab coat over clothing is recommended.			

SECTION IX - Physical and Chemical Properties

Appearance:	Syrupy liquid	Explosion limits:	Not an explosion hazard
Color	Colorless	Water solubility:	Fully miscible
Odor	Odorless	Evaporation rate:	NA
Boiling point:	No data	Specific gravity range:	1.5 - 1.8
Flash point	Not applicable		

SECTION X - Stability and Reactivity

Stability:	Stable if stored as directed.
Conditions to avoid	N/A
Materials to avoid	Strong caustics, metals,
Hazardous decomposition products:	Fumes of phosphorous oxide
Hazardous polymerization products:	Will not occur

SECTION XI - Toxicological Information

Ingestion:	Corrosive. May cause sore throat, abdominal pain, nausea, severe burns to mouth, throat, upper respiratory tract, and stomach.
Eye contact:	Corrosive. May cause redness, pain, blurred vision, eye burns.
Skin contact:	Corrosive. May cause redness, pain, skin burns.
Inhalation:	Not an inhalation hazard under normal use.
Prolonged exposure:	No information found.

SECTION XII - Ecological Information

Slightly hazardous for water.

SECTION XIII - Disposal Considerations

Do not allow undiluted product or large quantities to reach ground water, or sewage system.

Dike and cover spilled liquid with dirt, vermiculite or other inert absorbent. Cover spill with sodium bicarbonate and mix to neutralize. Neutralized waste must be disposed of in an approved disposal facility.
 Dispose containers and unused contents in accordance with Federal, State and local environmental regulations.

SECTION XIV - Transport Information

Land transport

DOT Hazard Class: Corrosive
 Class 8
 UN No 1805
 Packaging group III
 Hazard label 8
 Description of goods 1805 Phosphoric acid mixture

Air transport

ICAO/IATA Class: 8
 UN/ID Number: 1805
 Label 8
 Packaging group: III
 Shipping name: Phosphoric Acid, Liquid mixture

Maritime transport

Class: 8
 UN Number: 1805
 Packaging group III
 EMS Number F-A,S-B
 Marine pollutant: No
 Shipping name: Phosphoric Acid, Liquid mixture

SECTION XV - Regulatory Information

CLASSIFICATION IN ACCORDANCE WITH EEC DIRECTIVES.

Hazard Classification Symbol: C Corrosive
 Risk statements R 21 Harmful in contact with skin
 R 22 Harmful if swallowed
 R 34 Causes burns
 Safety Statements S 24 Avoid contact with skin
 S 25 Avoid contact with eyes.
 S 26 If eye is contacted rinse immediately with water. Seek medical advice.

SECTION XVI - Other Information

	NFPA Hazard Classification	HMIS Hazard Classification
Health	3	3
Flammability	0	0
Reactivity	0	0
Specific Hazard / PPE	Corr	B

NFPA - National Fire Protection Association
 HMIS - Hazardous materials Identification System

N/A - Not Applicable
N/E - Not Established

CAUTION: PRODUCT FOR PROFESSIONAL USE ONLY.

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