



## Safety Data Sheet

### Section 1: Identification

**Product Name: Best-Etch**

**Product Use:** Designed to etch and prepare dentin and enamel.

**Manufacturer:** Inter-Med, Inc. / Vista Dental Products

**Address:** 2200 South St. Suite A, Racine, WI 53404

**Phone:** (877) 418-4782 **Fax:** (262) 636-9760

**24 HR. Emergency Telephone Number CHEMTREC (North America) :** 800-424-9300

**24 HR. Emergency Telephone Number CHEMTREC (International) :** +1 (703) 527-3887

### Section 2: Hazard(s) Identification

**2.1 Classification of the Substance or Mixture: GHS Classification:**

**Health**

**Environmental**

**Physical**

Corrosive to Metals 1 – H290 Not Hazardous No Physical Hazards

Skin Corrosion 1B – H314

**EU Classification:** Corrosive (C), R34

**2.2 Label Elements:**

Hazard pictograms (GHS-US)



**Signal Word:** Danger



Hazard Phrases	Precautionary Phrases
H290 – May be corrosive to metals H314 - Causes severe skin burns and eye damage	P264 – Wash thoroughly after handling P280 – Wear protective gloves/protective clothing/eye protection/ face protection P390 - Absorb spillage to prevent material damage. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P363 - Wash contaminated clothing before reuse. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 - Immediately call a POISON CENTER or doctor/physician. P321 - Specific treatment (see supplemental first aid instructions on this label). P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 - Dispose of contents and container in accordance with local and national regulations.

**2.3 Other Hazards:** Under United States Regulations (29 CFR 1910.1200 – Hazard Communication Standard), this product is considered hazardous.

**2.4 Unknown acute toxicity (GHS-US):** No data available.

## Canada

According to WHMIS

**2.1 Classification of the Substance or Mixture:** WHMIS Corrosive - E

**2.2 Label Elements:** WHMIS Corrosive - E



**2.3 Other Hazards:** In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).



### Section 3: Composition/Information on Ingredients

**3.1 Substances:** Not Applicable

**3.2 Mixture:**

Hazardous Components	C.A.S. #	Classification	WT %
Phosphoric Acid	7664-38-2	EU DSD/DPD: Annex I: C; R34 EU CLP: Annex VI: Skin Corr. 1B, H314, Corr. to Metals 1, H290 OSHA HCS 2012: Skin Corr. 1B, H314, Corr. to Metals 1, H290	35.0-39.0%

The exact concentration is being withheld as a trade secret.

Refer to Section 16 for the full text of the GHS and EU Classifications.

### Section 4: First-Aid Measures

Inhalation:	Administer oxygen if breathing is difficult. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Give artificial respiration if victim is not breathing. Move victim to fresh air.
Ingestion:	If swallowed give 2-3 glasses of water if victim is conscious and alert. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting. Obtain medical attention immediately if ingested. Do not use mouth-to-mouth method if victim ingested the substance. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Persons attending the victim should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair.
Skin:	For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Wash skin with soap and water. Remove and isolate contaminated clothing and shoes. Wash contaminated clothing before reuse.



Eye:

In case of contact with substance, immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention, preferably with an ophthalmologist. If the physician is not immediately available, eye irrigation should be continued for an additional 15 minutes. If it is necessary to transport the patient to a physician and the eye needs to be bandaged, use a dry sterile cloth pad and cover both eyes.

**4.2 Most Important Symptoms and Effects, Both Acute and Delayed:**

Refer to Section 11 – Toxicological Information

**4.3 Notes to Physicians (Treatment, Testing, and Monitoring):**

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

**Section 5: Fire-Fighting Measures**

Extinguishing Media:

Not combustible. Use extinguishing media suitable for surrounding fire.

**5.2 Special Hazards Arising from the Substance or Mixture:**

Not combustible. Under fire conditions, toxic, corrosive fumes are emitted.

**5.3 Advice for Fire-Fighters:**

**Fire Fighting**

General: Evacuate all personnel; use protective equipment for fire-fighting.

**Procedures:**

**Precautions for Fire**

Firefighters should wear full emergency equipment and approved positive pressure self-containing breathing apparatus.

**Fighters:**

**Recommended Protective Equipment for Fire Fighters:**

EYES/FACE	HANDS	RESPIRATORY	THERMAL



## Section 6: Accidental Release Measures

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Avoid contact with skin, eyes or clothing. Wear appropriate protective clothing as described in Section 8.

#### Recommended Personal Protective Equipment for Containment and Clean-up:

EYES/FACE	HANDS	RESPIRATORY	SKIN
			

### 6.2 Environmental Precautions:

Prevent entry into sewers and waterways. Report releases as required by local, state, and national authorities. Avoid contact with skin, eyes or clothing. Wear appropriate protective clothing as described in Section 8.

### 6.3 Methods and Material for Containment and Cleaning up:

Exercise caution during neutralization as considerable heat may be generated. Neutralize spill area with soda ash, sodium bicarbonate or lime. Flush neutralized spill with copious amounts of water.

### 6.4 Reference to Other Sections:

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information.

## Section 7: Handling and Storage

### 7.1 Precautions for Safe Handling:

Do not get on skin or in eyes. Avoid breathing vapors and mists. Do not ingest. Handle and open container with care. Use only with adequate ventilation. Use caution when combining with water; DO NOT add water to corrosive liquid, ALWAYS add corrosive liquid to water while stirring to prevent release of heat, steam and fumes. This product reacts violently with bases liberating heat and causing spattering.

### 7.2 Conditions for Safe Storage, Including Any Incompatibilities:

Store in a cool, dry, well-ventilated area away from heat, direct sunlight and all sources of ignition. Store away from incompatible materials. Keep container closed to prevent contamination.

**7.3 Specific End Use (s):** Refer to Section 1.2 – Relevant identified uses.



## Section 8: Exposure Controls/Personal Protection

### 8.1 Control Parameters:

Exposure Limits / Guidelines						
Result	ACGH	Argentina	Australia	Austria	Belgium	
Phosphoric Acid (7664-38-2)	STELs	3mg/m <sup>3</sup> STEL [CMP-CPT]	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	2 mg/m <sup>3</sup> STEL [KZW] (4 X 15 min)	2 mg/m <sup>3</sup> STEL
	TWAs	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA [CMP]	1mg/m <sup>3</sup> TWA	Not established	1mg/m <sup>3</sup> TWA
	MAKs	Not established	Not Established	Not Established	1mg/m <sup>3</sup> TWA [TMW]	Not Established
Exposure Limits / Guidelines (Con't)						
Result	China	Czech Republic	Denmark	Egypt	Finland	
Phosphoric Acid (7664-38-2)	STELs	3mg/m <sup>3</sup> STEL	Not established	Not established	3mg/m <sup>3</sup> STEL	2mg/m <sup>3</sup> STEL
	TWAs	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	Not established	1mg/m <sup>3</sup> TWA
	Ceilings	Not established	2mg/m <sup>3</sup> Ceiling	Not established	Not established	Not established
Exposure Limits / Guidelines (Con't)						
Result	France	Germany DFG	Germany TRGS	Greece	Hong Kong	
Phosphoric Acid (7664-38-2)	STELs	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL
	TWAs	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA
	MAKs	Not established	Not established	Not established	Not established	Not established
Exposure Limits / Guidelines (Con't)						
Result	Hungary	India	Indonesia	Ireland	Israel	
Phosphoric Acid (7664-38-2)	STELs	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL
	TWAs	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA
	MAKs	Not established	Not established	Not established	Not established	Not established
Exposure Limits / Guidelines (Con't)						
Result	Italy	Japan	Korea	Malaysia	Mexico	
Phosphoric Acid (7664-38-2)	STELs	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL
	TWAs	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA
	MAKs	Not established	Not established	Not established	Not established	Not established
Exposure Limits / Guidelines (Con't)						
Result	Netherlands	New Zealand	NIOSH	Norway	OSHA	
Phosphoric Acid (7664-38-2)	STELs	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL
	TWAs	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA
	MAKs	Not established	Not established	Not established	Not established	Not established
Exposure Limits / Guidelines (Con't)						
Result	Philippines	Poland	Portugal	Singapore	South Africa	
Phosphoric Acid (7664-38-2)	STELs	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL
	TWAs	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA
	MAKs	Not established	Not established	Not established	Not established	Not established
Exposure Limits / Guidelines (Con't)						
Result	Spain	Sweden	Switzerland	Taiwan	United Kingdom	
	STELs	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL	3mg/m <sup>3</sup> STEL
	TWAs	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA	1mg/m <sup>3</sup> TWA
	MAKs	Not established	Not established	Not established	Not established	Not established



**8.2 Exposure Controls:**

**Appropriate Engineering Controls:** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual Protection Measures (PPE)**

**Respiratory:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

**Eye/Face:** Wear face shield and eye protection. An emergency eye wash must be readily accessible to the work area. Ensure safety shower is available near all areas of bulk storage, delivery and use.

**Hands:** Wear protective gloves selected with regard to both durability as well as permeation resistance.

**Skin/Body:** Wear protective clothing.

Recommended Personal Protective Equipment			
EYES/FACE	HANDS	RESPIRATORY	SKIN
			

- ACGIH = American Conference of Governmental Industrial Hygiene
- PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)
- MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration
- STEL = Short Term Exposure Limits are based on 15-minute exposures
- MSHA = Mine Safety and Health Administration
- STEV = Short Term Exposure Value
- NIOSH = National Institute of Occupational Safety and Health
- NAB = Threshold Values (Indonesia)
- OEL = Occupational Exposure Limit(s)
- TWAEV = Time-Weighted Average Exposure Value
- OSHA = Occupational Safety and Health Administration
- TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures



## Section 9: Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties:

<b>Physical state:</b>	Gel	<b>Relative density:</b>	1.25 to 1.30g/cc @25°C/77°F
<b>Appearance:</b>	Blue, Homogeneous Gel	<b>Melting Point:</b>	Not determined
<b>Odor:</b>	None	<b>Boiling Point:</b>	Not determined
<b>Odor threshold:</b>	Not determined	<b>Solubility in Water:</b>	Partially Soluble
<b>Viscosity:</b>	Not determined	<b>pH:</b>	1.00-1.50

## Section 10: Stability and Reactivity

**10.1 Reactivity:** Stable at ambient temperature and under normal conditions of use.

**10.2 Chemical Stability:** Stable at standard temperature and pressure.

**10.3 Possibility of Hazardous Reactions:** None known.

**10.4 Conditions to Avoid:** Keep away from heat, sparks, incompatible materials, flames and other sources of ignition.

**10.5 Incompatible materials:** High temperatures, strong oxidizing agents. Keep away from sunlight and open flames.

**10.6 Hazardous Decomposition Products:** Oxides of phosphorus.

## Section 11: Toxicological Information

### 11.1 Information on Toxicological Effects:

Chronic Effects:	No chronic health effects reported.
Target Organs:	No target organs reported.
Carcinogenicity	Not classified.
NTP:	No
IARC:	No

## Section 12: Ecological Information

**12.1 Toxicity:** No data available

**12.2 Persistence and Degradability:** No data available

**12.3 Bio-accumulative 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 Treatment Methods: Regulations:** Dispose in accordance with all national and local regulations.  
**Waste Treatment Recommendations:** Dispose in accordance with national and local regulations.  
**US EPA:** This material is not considered a hazardous waste under the United States Resource Conservation and Recovery Act when disposed.

To minimize exposure, refer to section 8 (exposure controls/personal protection).

## Section 14: Transport Information

**14.1. UN number**

UN 1805

**14.2. UN proper shipping name**

Phosphoric Acid Solution

**14.3. Transport hazard class(es)**

Not applicable

**14.4. Packing group**

III

**14.5. Environmental hazards**

Not applicable

**14.6. Special precautions for user**

None known

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not relevant

## Section 15: Regulatory Information

**15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:**

**Federal and State Regulations:**

Illinois toxic substances disclosure to employee act: Phosphoric acid

Illinois chemical safety act: Phosphoric acid

New York release reporting list: Phosphoric acid

Rhode Island RTK hazardous substances: Phosphoric acid

Pennsylvania RTK: Phosphoric acid

Minnesota: Phosphoric acid

Massachusetts RTK: Phosphoric acid

Massachusetts spill list: Phosphoric acid

New Jersey: Phosphoric acid

New Jersey spill list: Phosphoric acid

Louisiana spill reporting: Phosphoric acid

California Director's list of hazardous substances: Phosphoric acid



SARA 302/304/311/312 extremely hazardous substances: Phosphoric Acid  
 SARA 313 toxic chemical notification and release reporting: Phosphoric Acid  
 CERCLA: Hazardous Substances: Phosphoric Acid, 5000lbs.

**California Proposition 65:** No

**WHMIS Canada:** Class E - corrosive liquid.

**DSCL (EEC):** R34 – Causes burns.

**15.2 Chemical Safety Assessment:** None required.

## Section 16: Other Information

HMIS Hazard Rating

Health: 3 / Flammability: 0 / Reactivity: 0

Full text of Classification abbreviations used in Section 2 and 3:

H290

H314

Xi

R34

S36

S37

S39

May be corrosive to metals

Causes severe burns and eye damage; Skin

Corrosion 1B

Irritants

Causes burns.

Wear suitable protective clothing.

Wear suitable gloves.

Wear eye/face protection.

The data and information given in this material safety data sheet are accurate to the best of our knowledge on the date of preparation. It does not indicate any warranty or representation.

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