

SAFETY DATA SHEET: 37% Phosphoric Acid Solution

Section I – IDENTIFICATION

Product Name:	Enamel Conditioner Solution
Common Name:	Adhesive Accessories
Material:	37% Phosphoric acid Solution
Recommended Use:	TP Orthodontics' products are intended for use in orthodontic treatment.
Restrictions on Use:	TP Orthodontics' products are intended for use by trained dental professionals and orthodontists, who have the primary responsibility to identify any possible contraindications that may preclude the use of this product. U.S. Federal law restricts this device to sale by or on the order of a dental professional.
Product Manufacturer:	TP Orthodontics, Inc. 100 Center Plaza La Porte, IN 46350-9672 USA Phone: 800-348-8856 Hours: M-Th 7a-4:30p Fax: 219-324-3029 Internet: www.tportho.com
Emergency Number:	800-348-8856 Available during normal business hours: Monday-Thursday 7am to 5pm CST and Friday 7am to 12pm CST

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Section II – HAZARD IDENTIFICATION

General Hazard Statement: This SDS has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential and type of exposure.

Pictograms:

Danger



Warning

Signal word:**Classification of the substance or mixture:****GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)**

Corrosive to metals (Category 1) H290

Acute toxicity (Category 4, Oral) H302

Skin corrosion (Category 1B) H314

Serious eye damage (Category 1) H318

Hazard statements:

H290 -- May be corrosive to metals

H302 -- Harmful if swallowed

H314 -- Causes severe skin burns and eye damage

H315 -- Causes skin irritation

H318 -- Causes serious eye damage

H319 -- Causes serious eye irritation

H402 -- Harmful to aquatic life

H412 -- Harmful to aquatic life with long lasting effects

Precautionary statements:

P264 -- Wash hands thoroughly after handling

P270 -- Do not eat, drink or smoke when using this product

P280 -- Wear protective gloves, eye protection, face protection

P301+P330+P331 -- If swallowed: rinse mouth. Do NOT induce vomiting

P303+P361+P353 -- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

P305+P351+P338 -- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P321 -- Specific treatment (see First aid measures on this label)

P363 -- Wash contaminated clothing before reuse

P332+P313 -- If skin irritation occurs, get medical advice/attention

P337+P313 -- If eye irritation persists, get medical advice/attention

P501 -- Dispose in a safe manner in accordance with local/national regulations.

Hazards not otherwise classified (HNOC) or not covered by GHS: none

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Section III – COMPOSITION/ INFORMATION ON INGREDIENTS

Mixtures: *

Ingredient(s)	CAS No.	EC No.	Wt. %**
Igepal® CO-520	68412-54-4	500-024-6	<1
Tetrapotassium pyrophosphate	7320-34-5	233-338-4	<1
Phosphoric acid, conc.=85%	7664-38-2	616-646-7	35-45

*No minor components need to be disclosed according to the applicable regulations.

**The exact weight percentages of this composition have been withheld as a trade secret. Other ingredients in the composition are deemed non-hazardous in the final mixture.

Section IV – FIRST-AID MEASURES

- Skin:** Take off contaminated clothing and immediately wash skin with soap and water. If signs/symptoms develop, get medical attention. Wash clothing before reuse.
- Eyes:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove contact lenses if easy to do and continue rinsing.
- Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
- Inhalation:** Move into fresh air. If breathing difficulty occurs, get prompt medical attention.

Section V – FIRE-FIGHTING MEASURES

- Flash Point and Method:** NA
- Flammability Limits:** NA
- Auto-ignition Temperature:** NA
- Melting Point:** NA
- General Hazard:** Not combustible in the shipped form
- Firefighting Instructions:** No special instructions for product shipped
- Firefighting Equipment:** No special equipment for product as shipped

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Combustion Products: No hazardous decomposition products are expected

Section VI – ACCIDENTAL RELEASE MEASURES

General: Avoid release to the environment. Prevent soil and water pollution. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Section VII - HANDLING AND STORAGE

Storage Temperature: Store at room temperature.

Storage Pressure: Not applicable.

General Storage: Keep product in a dry and well-ventilated place. Incompatible with strong bases and acids. Store out of direct sunlight.

Section VIII – EXPOSURE CONTROLS/ PERSONAL PROTECTION**Control Parameters**

Phosphoric acid, conc.=85% (7664-38-2)

Authority	Type	Limit	Source of Exposure Limit Data:
ACGIH	TWA	1 mg/m ³	ACGIH: American Conference of Governmental Industrial Hygienists
ACGIH	STEL	3 mg/m ³	
OSHA	TWA	1 mg/m ³	OSHA: Occupational Safety and Health Administration
OSHA	STEL	3 mg/m ³	
			TWA: Time Weighted Average
			STEL: Short Term Exposure Limit

Personal Protection Equipment

Eyes: Safety glasses recommended. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin: Gloves recommended when handling.

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Section IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Green liquid
Odor	Slight acidic odor
Physical State	Viscous liquid
pH	0-1
Melting/Boiling Point	N/A
Flash Point	N/A
Evaporation Rate	N/A
Flammability	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Relative Density	N/A
Solubility in water	Water soluble
Auto-ignition Temp	N/A
Decomposition Temp	N/A
Viscosity	250-350 cps

Section X – STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Reactivity: No data available.

Incompatible Material: Strong bases, powdered metals.

Conditions to Avoid: Direct sunlight. Extreme high or low temperatures.

Section XI – TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified

Skin corrosion/irritation

Causes severe skin burns and eye damage

Serious eye damage/eye irritation

Causes serious eye damage

Respiratory or skin sensitization

Not classified

Germ cell mutagenicity

Not classified

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Additional information

Product is destructive to mucous membrane and upper respiratory tissues, eyes, and skin. Serious health hazard if swallowed.

Section XII – ECOLOGICAL INFORMATION

Toxicity

Phosphoric acid, conc=85% (7664-38-2)

LC50 fish 1	138 mg/l (96 h; Pisces; Pure substance)
LC50 other aquatic organisms 1	100 - 1000 mg/l (96 h; Protozoa; Pure substance)
LC50 fish 2	100 - 1000 mg/l (Pisces; Pure substance)
LC50 other aquatic organisms 2	240 mg/l (Pure substance)
TLM fish 1	138 ppm (24 h; Gambusia affinis; Pure substance)
Threshold limit other aquatic organisms 1	100 - 1000,96 h; Protozoa; Pure substance
Threshold limit other aquatic organisms 2	240 mg/l (Pure substance)

Igepal® CO-520

Section XIII – DISPOSAL CONSIDERATIONS

General: Safely dispose in accordance with local/national regulations. Adhesive may be cured prior to disposal by exposing to ambient light.

Section XIV – TRANSPORTATION INFORMATION

Department of Transportation (DOT) Hazard Class: 8 – Class 8 – Corrosive material 49 CFR 173.136

Hazard label (DOT): 8-Corrosive



Packing group (DOT): III-Minor Danger

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Section XV – REGULATORY INFORMATION

TSCA (Toxic Substances Control Act):
Not Applicable

CERCLA (Comprehensive Response & Liability Act):
Not Applicable

SARA Title III (Superfund Amendments & Reauthorization Act):
311/312 Hazardous Categories – Acute health hazard, chronic health hazard.
313 Product Ingredients – This product does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

California Safe Drinking Water Act (Prop 65) listing: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Chemical Name	CAS No.	Revision Date
Ethylene oxide	75-21-8	2009-02-01

Section XVI – OTHER INFORMATION

HMIS Rating:

Health hazard:	3	Serious hazard – Major injury likely unless prompt action is taken and medical treatment is given.
Flammability:	0	Minimal hazard
Physical hazard:	0	Minimal hazard

NFPA Rating:

Health hazard:	3	Short-term exposure could cause serious temporary or residual injury even though prompt medical attention was given.
Fire hazard:	0	Materials that do not burn.
Reactivity hazard:	0	Normally stable, even under fire exposure conditions, and are not reactive with water.

Full text of H-Statements referred to under Section 2:

Skin Irrit. 2	Skin corrosion/irritation Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Aquatic Acute 3	Acute aquatic toxicity Category 3
Aquatic Chronic 3	Chronic aquatic toxicity Category 3
Metal Corr. 1	Corrosive to metals Category 1
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Skin Corr. 1B	Skin corrosion Category 1B
Eye Dam. 1	Serious eye damage Category 1
H290	May be corrosive to metals

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H302	Harmful if swallowed
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H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

All the information is collected from Supplier certificate of analysis, manufacturing process, technical files and known history from 70 years of experience and is believed to be correct as of the date issued.

By supplying above information, TP Orthodontics, Inc. assumes no legal responsibility of any kind for the accuracy, completeness, or use of the data supplied as well as the product mentioned in the foreclosure