TOOTHPASTES

MI Paste® ONE



MI Paste Tube and Box

PreviDent® 5000 ppm Booster Plus (Rx only) (1.1% Sodium Fluoride) Toothpaste



<u>Tube of Toothpaste</u>

Active Ingredients

RECALDENT®

CPP-ACP (casein phosphopeptideamorphous calcium phosphate) 1100ppm NaF & silica 5% KNO3

Mech of Action

- CPP-ACP attaches to teeth and bacteria.
- Releases calcium and phosphate into the saliva --> remineralization by fluoride, inhibits plaque and demineralization.
- Interaction with hydrogen ions forms calcium hydrogen phosphate and produce new enamel material.
- RECALDENT® "combines with, and stabilizes, fluoride to create an excellent source for building fluorapatite" (GC Dental, 2023).

Instruction for Use

- Apply MI Paste® ONE on toothbrush.
- **Brush for 2 minutes**
- Expectorate, do not rinse.
- Refrain from eating for **30 minutes**.
- Use **2x/day**.

<u>Tricalcium Phosphate</u>

 $Ca_3(PO_4)_2$

Mech of Action

- Stable Calcium & Phosphate Source
 - → provides calcium and phosphate for enamel remineralization. (Meyer et al.,2018)
- **Controlled Release** → Special coating activates with saliva, ensuring minerals are available when needed.
- **Boosts Fluoride Effectiveness** → form stronger, acid-resistant fluorapatite for better enamel protection. (Meyer et al.,2018)
- **Targets Demineralized Areas** → binds to weakened enamel, delivering minerals directly where repair is needed.
- Prevents Further Mineral Loss \rightarrow Strengthens enamel, reducing the risk of cavities and sensitivity.

Instruction for Use

- Apply a thin ribbon of toothpaste to a toothbrush
- Brush once daily for 2 minutes, preferably at bedtime, instead of regular toothpaste
- Spit out; do not eat, drink, or rinse for 30 minutes for best results

Recommendations

- For adults and children 12 years or older
- Tooth sensitivity
- Remineralization
- Prevention of caries and white spot
- Tooth erosion and wear
- Dry mouth
- pH buffering

- Adults and children 6 years and older
- People looking for daily enamel strengthening
- Those with mild enamel erosion or earlystage demineralization
- Individuals with occasional sensitivity

Contraindications

- Allergy Risk Skin irritation possible for those with a milk protein or hydroxybenzoates allergy
- Not for children under 6 years Fluoride levels in toothpaste is too high
- Titanium Dioxide Ingredient is possibly carcinogenic to humans
- Allergy risk May cause irritation in sensitive individuals.
- Kidney disease Caution for those with kidney issues or prone to kidney stones.
- Fluoride interaction May affect fluoride absorption.
- **Phosphate intake** Avoid if on a phosphate-restricted diet.
- Do not use in pediatric patients under age 6 years - unless recommended by a dentist or physician.

Purchasing & Costs

Purchase at:

Walmart, DentalHealth.com, DarbyDental.com

Average cost:

\$20

Purchase at:

Consulting with dentist for Rx

Average cost:

\$27

References

- Calcium Phosphate Tribasic Tablet Uses, Side Effects, and More. (n.d.). WebMD. https://www.webmd.com/drugs/2/drug-19287/calcium-phosphate-tribasic-oral/details
- GC Dental. (2023). MI Paste® Family [Brochure].

 https://www.gc.dental/america/products/operatory/preventive/mipaste-one
- Meyer, F., Amaechi, B. T., Fabritius, H. O., & Enax, J. (2018). Overview of Calcium Phosphates used in Biomimetic Oral Care. The open dentistry journal, 12, 406–423. https://doi.org/10.2174/1874210601812010406