



Poison HOTLINE

1-800-222-1222

August 2019



Did you know

The AP (Approved Product) Seal on art and craft materials certifies the product is safe and does not contain sufficient quantities to be toxic. The AP seal is often found on products known for use by children.

The CL (Cautionary Label) Seal may appear on a small percentage of adult-only art materials. If used correctly, these products are not hazardous. These products should never be given to children.

Each product in the program undergoes extensive toxicological testing that covers both acute and chronic toxicity concerns before it is granted the right to bear the ACMI certification seal.

Fluoride

Fluoride can be found in dental products, automobile tire cleaners, rust removers, masonry cleaners, glass etchers, and silicon chip cleaners.

Fluoride Ingestions

Vomiting and abdominal pain are common with ingestions of 3-5 mg/kg of elemental fluoride. Hypocalcemia and muscle symptoms (twitching, weakness) can occur after ingestion of 5-10 mg/kg of fluoride. Fatalities have occurred after ingestion of 32-64 mg/kg of fluoride.

Because of the low concentration of fluoride in household dental products, toxicity from exposure to these products is extremely rare. Systemic toxicity can occur after ingestion of high-concentration fluoride products.

Dermal Exposures

Dermal exposures to fluoride-containing cleaners are common, and toxicity can range from minor skin irritation to death after exposure to products with a high concentration of hydrofluoric acid.

Dermal exposures to household products that contain low concentrations of fluoride result in slowly developing tissue destruction and pain. Over several hours, the tissue may become hyperemic with blanching and necrosis.

Severe systemic toxicity, along with dermal burns, can develop after exposure to industrial products containing high concentrations of sodium fluoride, sodium bifluoride or hydrofluoric acid. Burns involving as little as 1% body surface area from high-fluoride-concentration products may produce systemic fluoride toxicity with hypocalcemia, hypomagnesemia and hyperkalemia.

Treatment of Fluoride Exposures

- Children with inadvertent ingestions of low-fluoride-concentration dental products can usually be managed at home by dilution with 4 to 8 ounces of milk and monitoring for nausea and vomiting.
- Treatment for dermal exposure is immediate irrigation. Burns can be treated with topical, intradermal or intra-arterial calcium.
- For systemic toxicity, monitor ionized calcium, magnesium and potassium levels. The goal of therapy is to maintain these electrolyte concentrations in the normal range.

*Janet Gray, RN, BSN, CSPI
Certified Specialist in Poison Information*

POISON
Help
1-800-222-1222

Hotline Editor: Edward Bottei, MD

Post and share this edition of **Poison Hotline** with your colleagues. Send comments or questions to Poison Hotline, 712-234-8775 (fax) or Tammy.Noble@UnityPoint.org. To subscribe or unsubscribe from this distribution list, contact the IPCC education office at 712-279-3717. Read past issues of **Poison Hotline** at www.iowapoison.org.