- used. They are usually found in aerosol form. There are two forms of hydrocarbon cleaner: halogenated and non-halogenated.
- (b) Halogenated hydrocarbons contain a high percentage of chlorofluorocarbons (CFCs), various combinations of fluorine and chlorine. Examples of CFCs found in halogenated hydrocarbon cleaners used in the elevator industry include 1,1,1-Trichloroethane (methyl chloroform), Trichloro-trifluoroethane (Freon 113), and dichlorodifluoromethane (Freon 12).

## 14.3.3 Water-Based Cleaners

- (a) Water-based cleaners are being used as an effective substitute for petroleum naphtha cleaners to remove oils and grease, but without the potential fire and health hazards posed by the chemical compounds found in the petroleum naphthas. Water-based cleaners are generally used in a liquid or semi-liquid (gel) form. They are also available for cleaning electric contacts (e.g. Simple Green, etc.).
- (b) Although the most prevalent ingredient in these cleaners is water, precautions are necessary. Repeated and prolonged skin contact can remove the oil from the skin, leading to irritation and possible infection. Good personal hygiene and the use of gloves and chemical goggles will limit exposure.

## 14.4 Babbitting

Babbit contains lead, which is a highly toxic material and shall be handled correctly. The primary route of exposure is through the inhalation of fumes, though ingestion can be significant if hands are not washed before eating or smoking. Repeated overexposure can result in elevated concentrations in the body, which is slowly eliminated when exposure ceases.