Get to know the facts about Sodium Hydroxide

What is sodium hydroxide?

Sodium hydroxide, also commonly referred to as caustic soda or lye, is commonly used in household cleaners and soap as it is very effective at breaking down oils and fat.

How is it made?

Salt (sodium chloride) is dissolved in water, creating a brine. Electricity is then applied to the mix in specially designed tanks, or cells, that contain dozens of plastic membranes, creating compartments which allow the charged brine mix to separate into three components: chlorine; **sodium hydroxide**; and hydrogen. This process is known as electrochemistry, and generates virtually no waste, greenhouse gases or pollutants.

What does sodium hydroxide look and smell like?

Sodium hydroxide is a clear, odourless liquid. At Chemtrade, for transportation and distribution, the liquid is mixed with water to create a 50% strength solution.

What is sodium hydroxide used for?

Sodium hydroxide is used in hundreds of products that many Canadians use every day. For home use, sodium hydroxide can be found in soap and household cleaners, but it is also widely used in several industries like food preservation, pharmaceuticals, public water treatment facilities for pH regulation, textiles, glass production, aluminum ore production, the oil and gas industry, paper, and fuel cell production.

What are the risks?

Chemtrade's first priority in all operations is safety. The safety of our employees, the community, and the environment. At every step, from production through to delivery to the customer, we ensure that the sodium hydroxide we produce is being safely manufactured, stored, and shipped.

Sodium hydroxide can be caustic to the skin, and if exposed to high concentrations, can cause chemical burns. The standard first aid treatment is to flush an area which has come into contact with concentrated sodium hydroxide is to flush the area with cold water for 10 to 15 minutes.

Saponification is the name of the chemical reaction needed to make soap. To start, you need to mix a fat (animal or vegetable based) with an alkali such as sodium hydroxide, and add heat. This creates the reaction, saponification, which has been used for centuries to produce soap and cleaners for home use.