

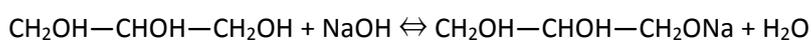
Task:

Is glycerin mix with s.hydroxide solution safe?
and
is glycerin is heated then add s.hydroxide solution safe?

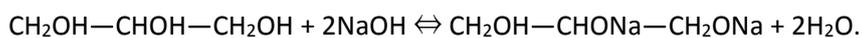
Answer:

Glycerin with NaOH forms sodium monoglyceride or diglyceride, which is safe.

The chemical equation for this reaction is



Or



When glycerin is heated the following reaction occurs



It's dehydration reaction. The product of this reaction is acrolein. It is a colourless liquid with a piercing, disagreeable, acrid smell. The smell of burnt fat (as when cooking oil is heated to its smoke point).

Acrolein is toxic and is a strong irritant for the skin, eyes, and nasal passages.

Adding NaOH doesn't change anything.