

ABSTRACT

A PROCESS FOR THE PREPARATION OF PENTAERYTHRITOL

5 A process for the preparation of pentaerythritol,
comprising reacting formaldehyde, acetaldehyde and sodium
hydroxide and acidification with formic acid. These steps
take place in a reactor with supplies of formaldehyde, sodium
hydroxide, acetaldehyde and formic acid and at the end the
10 solution formed is evacuated to a buffer tank of larger
capacity than the reactor. In the reactor new reactions and
acidifications are successively reinitiated by new supplies.
In the first place a formaldehyde solution is added, followed
by simultaneous but separate additions of sodium hydroxide
15 solution and acetaldehyde, forming a reaction mixture in such
a way that the flowrates of the solutions vary with the time
and that the temperature at which the reactions are conducted
also varies with the time. The outflow from the buffer tank
is constant and continuous.