

Distillation Section: Tempo True Inhibitors

During the last 30 years the Tempo inhibitors have become the market leading products for many different monomers. They are extremely effective due to their reaction speed – radical to radical reactions are a thousand times faster than hydroxylamine inhibitors and when used in the correct dose they can effectively stop polymerisation.

Nufarm were at the forefront of developing large scale commercial processes for these inhibitors that changed their use from laboratory curiosities to industrial use.

The inhibitors have become firmly established in styrene manufacturing plants where they can be used on their own, in low temperature units, or in combination with a retarder. Nufarm produces the market leading 4-Oxo Tempo and 4-Hydroxy Tempo in addition to other more speciality Tempos

- 4-Hydroxy Tempo – Available as a solid flake and also in polar solvents
- 4-Oxo Tempo – This is only available as solutions due to the pure material being unstable. We provide it as a solution in ethylbenzene or styrene monomer
- Inhibitor P500 – A specialist high temperature stable product it has found use in styrene units within heat exchangers and high temperature re-boilers. In addition, it has found applications in a number of other monomers including divinylbenzene and butadiene. It is a liquid product and can therefore be pumped without the need for a solvent

Our Technical Service team are available for advice on the best product to use for your process. All the Tempo molecules have the same reactive free radical but through careful molecular design the physical chemistry properties can be changed.

The products are available in a variety of packaging from 20 kg up to 25,000 kg isotanks.