

## Nufarm Polymerization Inhibitors for Butadiene in SBR Plants

Styrene butadiene rubber is used primarily in the production of car and truck tyres and is produced using either solution or emulsion polymerisation.

There are a number of applications for inhibitors and anti-oxidants in the production of the SBR rubber to keep the process running smoothly

- Butadiene is re-distilled before use to remove stabilisers
  - **Inhibitors are used for this**
- The polymerisation reaction can be stopped by the addition of short stopping agents
  - ***Inhibitors are used for this***
- Unreacted monomers are then stripped off for recovery
  - Butadiene is stripped by flash distillation followed by vacuum distillation
  - Unreacted Styrene is removed by steam stripping in a vacuum column
  - ***Inhibitors are used to prevent polymerisation here***

Nufarm is the supplier of inhibitors, anti-oxidants and technical service to a major producer of SBR in Europe. Our products are added to the distillation column to protect butadiene when it is re-distilled prior to polymerization.