



PHARMACEUTICAL



Aseptic Packaging

Many pharmaceutical products cannot withstand any form of thermal sterilisation, in which case aseptic filtration followed by packaging in pre-sterilised containers in a cleanroom environment is the best solution.

Because aseptic filtration/fill operations are complex, environmental controls are required to maintain standards. Nitrogen gas can be used to provide a suitable atmosphere and for filter integrity testing.

Transfer

High-pressure nitrogen gas can be used to assist safe transfer of substances from one vessel to another. This highly effective solution speeds up the process without causing any dissolution or build-up of substances.

Purging

Manufacturing and analytical equipment can be purged with nitrogen gas to remove oxygen and water vapour from process lines, this can increase product quality and reduce the need for further conditioning treatments.

Blanketing

API's and final drug products must be stored in the appropriate way to ensure humidity and oxygen do not affect the product and powders do not agglomerate. Blanketing with nitrogen provides an inert atmosphere that suppresses airborne contamination such as moisture and bacteria. Nitrogen will also provide a blanket to protect potentially reactive materials from contact with oxygen, and so maintain quality.

