

## Description

As a peptizer **PEPTON 44** efficiently reduces the viscosity of natural rubber and general purpose synthetic elastomers during mastication at elevated temperatures.

## Composition

2,2' Dibenzamido diphenyl disulfide blended with a synergistic activator and an inert carrier.

## Typical Properties

Appearance	fine light-grey to blue/green powder
Odour	slight, characteristic
Specific gravity	approximately 1.80
Ash % wt.	42 typical
Acetone insolubles %	51 max
Moisture %	1 max

## Applications

**PEPTON 44** is recommended to increase the efficiency of open or internal mixer mastication of natural rubber and unsaturated synthetic elastomers, where reduction of viscosity is desirable.

## Temperature Range

Effective in mastication at 70°C and above, best performance is obtained at 150 - 160 °C.

## Recommended Dosage

0.2 - 0.5 phr for natural rubber  
1.5 - 3.0 phr for synthetic elastomers

## Behaviour in Rubbers

**PEPTON 44** catalytically promotes molecular chain scission during mastication, thereby reducing mastication time and power consumption, giving lower production costs and increased production capacity. The peptising action of **PEPTON 44** is inhibited by sulphur and the viscosity of compounded stocks is therefore stable on storage. Furnace blacks, mineral fillers, zinc oxide and other materials likely to be present in first stage mixing operations or during the early part of high-speed single-stage mixing have little or no effect on performance of **PEPTON 44**.

Antioxidants generally retard the peptising action and they should be added later in the cycle when the product is used in direct compounding. The effects on rate and state of cure and on the properties of vulcanised compounds are negligible.

## Storage Stability

Good under cool dry conditions. However **PEPTON 44** should be used within four years of certification. Some compaction may occur in storage. This is normal and will not affect the inherent performance of the product. It is recommended that the product is used within 48 months of certification.

## Packaging

Multi-ply paper bags. Net weight 50 lb, maximum 2000 lb per pallet.