

UNIPASTE-P2 Series

Description

UNIPASTE series consists of highly effective urea-based activators for **UNICELL-D**, **UNICELL-OH**, **UNICELL-TS**, and **UNICELL-G**. It is used to adjust the decomposition temperature to suit the processing conditions. To prevent moisture absorption and agglomeration, **UNIPASTE** series is coated with fatty acids or metal soaps.

UNIPASTE series is especially recommended for rubber and plastic foams processed with **UNICELL-G**, as it reduces the unpleasant odor generated during the thermal decomposition of **UNICELL-G**.

UNIPASTE series is an essential ingredient for rubber compounds containing **UNICELL-G**.

Due to its basic characteristics, **UNIPASTE** series also accelerates the cross-linking (curing) rate, thereby reducing the amount of accelerator required.

All grades of **UNIPASTE** series are non-staining, non-discoloring, odorless, and completely dispersible in resin matrices.

When used in combination with **UNIPASTE** series, foaming agents release gases at lower temperatures, reducing energy costs and making them suitable for heat-sensitive substrates or applications where reduction of plasticizer fumes is required.

Moreover, they produce whiter foams than foaming agents. Coatings expanded with foaming agent/ **UNIPASTE** combinations are free from discoloration and allow a reduction in titanium dioxide content without sacrificing whiteness.

Properties of UNIPASTE series

Item	Specification		
Grade Name	P2	N3M	N3S
Chemical Name	Urea derivatives		
Appearance	Fine White Powder		
Decomposition Temperature (°C)	132~138	132~138	132~138
Gas Volume (ml/g)	120~130	120~130	120~130
Average Particle Size (μm)	4.0~6.0	2.6~3.4	4.0~6.0
Moisture Content (%)	0.3 max.	0.3 max.	0.3 max.

*Decomposition temperature and gas volume are measured when mixed with **UNICELL-G** in the ratio of 1:1

Decomposition of UNIPASTE series

UNIPASTE series activates **UNICELL-D**, **UNICELL-OH**, **UNICELL-TS**, and **UNICELL-G**, allowing decomposition at considerably lower temperatures. The decomposition temperature decreases gradually as the amount of **UNIPASTE** increases, and the activation effect is stronger for **UNICELL-G** than for **UNICELL-D**, **UNICELL-OH**, and **UNICELL-TS**.

When used in combination with **UNICELL-G**, the **UNIPASTE** series reduces the formaldehyde released from **UNICELL-G**, which otherwise causes an unpleasant odor in foams expanded with **UNICELL-G** alone.

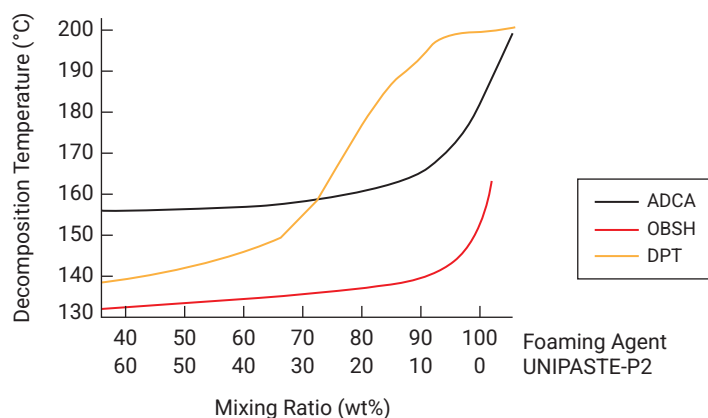


Fig. The activation effects of **UNIPASTE-P2** and **UNICELL-D**, **UNICELL-G**, and **UNICELL-OH**

*Surface coated Urea

*Urea based activators for foaming agents