Technical Information

KOSMOS® 54

Combination of KOSMOS® 54 , stannous octoate and ORTEGOL® 204, a cross-linker with a delayed reaction profile, are able to stabilizes the fresh foam block in a way that cold-flow is virtually prevented.

Physical properties

Appearance	clear, yellow liquid
Calculated OH number	300 mg KOH/g
Viscosity (25 °C)	1 000 – 2 000 mPas

There are, however, limits in the single use of ORTEGOL® 204:

- in formulations with high foam densities (> 40 kg/m³) with exceptionally high amounts of SAN.
- on short tunnels.

For such conditions the co-application of KOSMOS® 54 has proved to be advantageous. KOSMOS® 54 can be applied in quantities up to 0.5 parts per 100 parts polyol depending on the formulation.

The best results were achieved with an amount of approx. 0.1 parts per 10 kg foam density. The catalytic activity of KOSMOS® 54 requires a reduction of the stannous octoate to about one third of the amount originally applied.

A prolonged dwelling time in the tunnel always favors the cross-linking and thus the stabilizing reaction of ORTEGOL® 204.

In contrast to KOSMOS® 19 (DBTL) no addition of flame retardants is necessary in the system KOSMOS® 29 / ORTEGOL 204 / KOSMOS® 54.

Guideline for the use of KOSMOS® 54

SAN-Polyol, 15 % solid	100	100	100	pphp
Water, total	2.7	2.7	2.7	pphp
Water, added	2.7	2.4	2.4	pphp
Diethanolamine	1.2	0.6	0.6	pphp
ORTEGOL® 204	–	1.2	1.2	pphp
TEGOAMIN® 33	0.2	0.2	0.2	pphp
TEGOAMIN® BDE	0.05	0.05	0.05	pphp
KOSMOS® 19.	0.15	–	–	pphp
KOSMOS® 29	–	0.15	0.05	pphp
KOSMOS® 54	–	–	0.35	pphp
TCPP	2	–	–	pphp
TEGOSTAB® B 8716 LF 2	0.6	0.6	0.6	pphp
T 80	35.2	35.2	35.2	pphp

Recommended storage conditions

The product can be stored in sealed original package at temperatures between 20 °C and 30 °C for at least 12 months after date of delivery. At temperatures below 10 °C the product could be damaged. During prolonged storage the product could get cloudy. Gentle heating and homogenizing (30 – 40 °C) will return the product to a clear state.

Application

KOSMOS® 54 should be fed via a separate pipe directly to the mixing head. It should not be used as part of the water/amine activator, because of possible thickening of this mixture. KOSMOS® 54 cannot be dissolved in a polyol. To reduce the viscosity it can be diluted with Dipropylenglycol. Any mixture should be used within one day.

Packaging

600 kg pallet (24 x 25 kg in cans)
800 kg pallet (4 x 200 kg in steel drums)
1 000 kg plastic containers

Information concerning

- classification and labelling according to regulations for transportation of chemicals
- protective measures for storage and handling
- measures in case of accidents and fires
- toxicity and ecological effects

is given in our material safety data sheets.

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