

TECHNICAL SHEET

aspha-min® - additive for warm mix asphalt

Tradename:	aspha-min®
Trademark & patent protection:	International (PCT)
Purpose:	a) Warm mix asphalt, eg. for energy savings, reduced emissions, health & safety. b) Hot mix asphalt, eg. for improved or prolonged workability under adverse ambient conditions like cold and wind or with thin layers, stiff binders and manual laying.
Chemical characteristics:	Synthetic zeolite (sodium aluminium silicate), hydro thermally crystallized, spray dried. Contains crystalline water at about 20 % by mass.
Appearance:	aspha-min® is available a) as fine granulate with an average particle size of 380 µm or b) as fine powder with an average particle size of 3.5 µm
Packaging:	Big Bags of 500 kg or meltable bags of 3 kg each
Colour:	White
Specific mass:	2.0 g/cm ³
Compaction density:	~ 500 g/l
pH-Value (by 5% in water):	11,6
Water solubility:	None
Thermal behaviour:	Water content may be released almost entirely in a temperature range of between 85 °C (185 °F) and 180 °C (365 °F).
Classification:	aspha-min® is no hazardous substance. Please check our SDS for details.
Storage:	Between -15 °C (5 °F) and +70 °C (158 °F) no changes occur. Avoid humidity. No danger of dust ignition. Please check our SDS for details.
Feeding:	For in-plant transportation pneumatic devices as well as screw conveyors are applicable.
Application:	Add 0.3 % by mass to the mix, directly into the asphalt mixer at about the time of dosing of the bitumen! No pre-blending with either aggregate or bitumen. Any types of standard or polymer modified bitumen are applicable. No extending of the mixing time necessary maintaining full capacity of the plant.
Virtue:	Adding aspha-min® to the mix at about the same time as the bitumen will prompt a fine vapor spray thus creating micro pores in the bitumen. By slightly, temporarily and physically increasing the binder volume, the mix' workability will be either enhanced at higher temperatures (hot mix) or alternatively extended until reaching a temperature level roundabout 30 K lower than the standard (warm mix). However, adding aspha-min to the mix will not change the binder's rheology or the performance of the asphalt road surface. Full recyclability of the mix will be maintained.