

# MULTICRETE®

## Description

Multicrete® is a special binder for stabilising soils and mineral mixtures in foundation engineering, road construction and dam substructure.

### Basis for the indicated material characteristic values:

In order to obtain reproducible material characteristic values, the test series upon which this technical data sheet is based were conducted on a reference soil with a defined composition.

Reference soil: Loam (20% sand, 45% silt, 35% clay)

Water content in the soil in accordance with EN 1097-5: 19 %

The specified binder dosages relate to the dry mass of the stabilised soil.

## Uniaxial compressive strength (cylinder)

Sample preparation in accordance with DIN EN 13286-50 / Determination of the compressive strength in accordance with DIN EN 17892			
Binder	Dosage	Uniaxial compressive strength (cylinder) [MPa]	
		after 7 days	after 28 days
Multicrete S	4 %	≈ 0.8	≈ 1.2
Multicrete ST	4 %	≈ 0.7	≈ 0.9

## CBR-Value (California bearing ratio)

The CBR-value describes the load-bearing capacity of a soil/binder-mixture. Based on the CBR-value the deformation moduli  $E_{v1}$  and  $E_{v2}$  can be estimated using empirically determined correlations.

Sample preparation in accordance with DIN EN 13286-50 / Determination of the CBR-value in accordance with DIN EN 13286-47							
		CBR-value after [%]				Calculated deformation moduli*	
		24 h	2 d	3 d	7 d	after 24 hours	
						$E_{v1}$	$E_{v2}$
Reference soil without binder		≈ 1	-	-	-	≈ 4	≈ 7
Binder	Dosage						
Multicrete® S	4 %	≈ 30	≈ 35	≈ 40	≈ 45	≈ 47	≈ 80
Multicrete® ST	4 %	≈ 25	≈ 30	≈ 35	≈ 40	≈ 40	≈ 70

\*Calculation in accordance with Floss (1973)

Concerning the mentioned technical properties Multicrete ST corresponds to a mixture of 70% cement / 30% quick lime and Multicrete S corresponds to a mixture of 50% cement / 50% quick lime.

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The above data relate to tests under laboratory conditions with the usual metrological tolerances. These along with records of other "suitability tests" are designed to obtain information about the basic suitability of our product in respect of the intended purpose. Even in the case of a project-specific test, the information should not be regarded as a promise of properties with the effect that we can be held responsible for damages resulting from the absence of features and/or properties. Our information therefore does not release customers from the obligation to carry out their own specific tests and take decisions on their own responsibility.

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