



TECHNICAL DATA SHEET

RASCOhybrid HMS C1

RASCOhybrid HMS C1 is a special, factory-mixed, laboratory-monitored cement for the RASCOhybrid HMS system. It is a certified Portland composite cement CEM II/B-M (S-T) 42,5 R to standard SN EN 197-1. Its constituents are Portland cement clinker, burnt shale and granulated blastfurnace slag.

USE

RASCOhybrid HMS C1 is recommended as the C component for the RASCOhybrid HMS systems. Apart from its use in conjunction with the RASCOhybrid HMS system, it is also ideal for demanding civil engineering applications and projects subject to high requirements in terms of sulphate or AAR resistance, e.g. with crane-placed and pumpable concrete, AAR-resistant concrete, concrete with high sulphate resistance, shotcrete and concrete pavements.

FEATURES

- rapid strength development and waterproofness
- very high durability
- good homogenization with RASCOhybrid HMS systems
- good workability

APPROVALS

- standard SN EN 197-1



TECHNICAL / PHYSICAL DATA

C1-Cement

Granular grading	powdery	
Blaine value	4200 cm ² /g	
Bulk density	approx. 1,04 kg/ltr	
Density	approx. 3060 kg/m ³	
Expansion	0,9 mm	
Loss on ignition	1,0 %	
Water demand	29,2 %	
Start of set at 25° C	160 min	
Exposure class	XC, XD, XF, XA	
Compressive strengths at 25° C	2 days	approx. 25,5 N/mm ²
	7 days	approx. 55,0 N/mm ²
	28 days	58,0 N/mm ²
Storage/shelf life	at least 12 months when stored on pallets	

APPLICATION

For application of the RASCOhybrid HMS system, this cement is delivered to the place of injection by mortar injection pump and mortar hoses. The cement suspension is mixed with the RASCOhybrid HMS polyurethane system by means of a bypass and then injected via packers.

The pot life is mainly controlled through the percentage of the RASCOhybrid HMS AC added. Viscosity is mainly controlled through the percentage of the RASCOhybrid HMS polyurethane system added. The solids content of the suspension (selected w/c ratio) is dictated by the requirements of the relevant injection application.

MIXING

RASCOhybrid HMS C1 shall generally be mixed with a standard proprietary cement mixer to a homogeneous, lump-free consistency using clean water. The relevant quantity of mixing water for the required w/c ratio shall first be placed in the mixer. The full quantity of RASCOhybrid HMS C1 required shall not be added at once as this will make mixing difficult (action of surface forces).

GENERAL GUIDELINES

RASCOhybrid HMS C1 shall not be mixed with cements of other manufacturers. A minimum air, material and base temperature of 5 °C is required during application and drying. Please note that low temperatures influence the start of set and consequently strength development. It may be necessary to warm up the mixing water. In case of uncertainty regarding application, base or constructional particularities, please request advice.

SAFETY NOTICE

Suitable protective clothing, gloves and goggles shall be worn. An eyewash bottle shall be kept at hand. For further details, please consult the safety data sheet.

SUPPLY / ADDITIVES

Item No.	Product	Container	Contents
1113.9211.111	RASCOhybrid HMS C1	bag	25 kg

Grouting machines, equipment and accessories available on request

LEGAL NOTICE: The information provided on the use and application of our products in this technical data sheet is based on the present state of our knowledge. The customer shall bear sole responsibility for the proper specification, application and use of the products in line with the intended purpose, project-specific conditions and external actions. The most recent technical data sheet shall apply. The current technical data sheets are available at www.rascor.com. Our General Terms of Business shall form an integral part of this technical data sheet.

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