

CEM I 42,5 R

Portland Cement

- Composition:** SCHWENK Portland Cement CEM I 42,5 R is a hydraulic binder according DIN EN 197-1.
Its main ingredient is Portland cement clinker, which together with calcium sulphate as congealment stabiliser is milled to SCHWENK CEM I 42,5 R.
By stringent production monitoring during the complete production procedure a uniform quality on a high level is maintained.
- Properties:** SCHWENK Portland Cement CEM I 42,5 R is low on chromate. By addition of a chromate reducer the contents of water soluble chromium VI < 2 ppm.
- Application:** SCHWENK Portland Cement CEM I 42,5 R can be used for the production of all concretes according DIN EN 206-1/DIN 1045-2. Mainly it is applied for concretes of higher strength classes. For SCHWENK CEM I 42,5 R the following preferred fields of application unfold:
- Concrete goods industry**
Because of its strength development the SCHWENK CEM I 42,5 R is preferentially used for the production of paving stones, tubes, duct rings, plates as well as civil engineering and gardening components. The concrete strength needed for clearing the products can be reached fast and thus an economic production process can be achieved.
- Concrete precast industry**
With SCHWENK CEM I 42,5 R the concrete strength as requested in the concrete precast industry can be reached economically. The speedy strength development of this cement allows for a rational work process in the concrete precast industry.
- Ready-mix concrete industry**
By the greater heat development during the setting of the cement SCHWENK CEM I 42,5 R offers advantages during the colder season for the production of ready-mix concrete, as at use of this cement economical stripping and aftertreatment times can be achieved.
- Concrete additives:** The addition of concrete additives is permitted according DIN EN 206-1/DIN 1045-2, if they conform to the relevant regulations or a general technical approval is available. Concrete additives with approval may only be used under the conditions as stated in the approval document.
For the production of pretensioned concrete with direct bond according DIN 1045-1 as concrete additives only fly-ash and silica fume or inert powdered minerals according DIN EN 12620 and pigments with proven harmlessness for pretensioning steel, may be used.
An initial test according DIN EN 206-1/DIN 1045-2 is necessary for the addition of concrete additives.
- Concrete admixtures:** The addition of concrete admixtures is permitted according DIN EN 206-1/DIN 1045-2, if they conform to the relevant regulations or a general technical approval is available and when used under the conditions as stated in the approval document.
An initial test according DIN EN 206-1/DIN 1045-2 is necessary for the addition of concrete admixtures.

CEM I 42,5 R

Quality control:	SCHWENK Portland Cement CEM I 42,5 R is subject to a self monitoring by our in-house laboratories and is externally monitored by the Verein Deutscher Zementwerke e.V. Düsseldorf
Suppliers:	Allmendingen, Bernburg, Karlstadt
Delivery:	As bulk in silo trucks and bagged good in bags with 25 kg contents.
Storing:	SCHWENK Portland Cement CEM I 42,5 R must be dry stored and protected against humidity.
Cited standards:	DIN EN 197-1 Cement Part1: Composition, specifications and conformity criteria for common cements DIN EN 206-1 Concrete Part1: Specification, performance, production and conformity DIN 1045-1, 2 Concrete, reinforced and prestressed concrete structures Part1: Design and construction Part2: Concrete - Specification, properties, production and conformity - Application rules for DIN EN 206-1 DIN EN 12620 Aggregates for concrete

Technical support: Our application support team informs you regarding all application-technological questions.

Ulm Telephone: +49 731 9341-123 · Telefax: +49 731 9341-398
Bernburg Telephone: +49 3471 358-500 · Telefax: +49 3471 358-516
E-Mail schwenk-zement.bauberatung@schwenk.de

Sales offices: **Bernburg** Telephone: +49 3471 358-0 · Telefax: +49 3471 358-516
Karlstadt Telephone: +49 9353 797-0 · Telefax: +49 9353 797-499

Status: August 2012

SCHWENK Zement KG · Hindenburgring 15 · 89077 Ulm · Telephone: +49 731 9341-0 · Telefax: +49 731 9341-416
E-Mail: info@schwenk-zement.de · www.schwenk-zement.de

The information of this leaflet is based on the actual knowledge and experiences. They provide an indicative value for the fundamental suitability and have to be adapted by examinations and tests for the practical application by the processor. For this the relevant valid laws, standards and guidelines as well as the generally accepted rules of the building technology are to be observed. With the publishing of this Technical Leaflet all earlier published Technical Leaflets lose their validity. Alterations in the scope of product and application-technological further developments are reserved. For all commercial relations our conditions of sales and delivery in their actual version apply.