

## Technical datasheet

# Infracement CEM I 42.5 N-SR 3 MH/LA

Portland cement, sulfate resistant, moderate heat develop., low in alkalis

### Composition

SCHWENK *Infracement* is a hydraulic binder according to SS-EN 197-1. The main component of the cement is Portland cement clinker. Additionally, calcium sulfate is added to regulate the setting time and as minor component limestone. The cement has a C<sub>3</sub>A content not over 3,0 % according to the standard SS-EN 197-1. The sodium equivalent is not above 0,60 % (SS 134203) and the heat development is below 320 J/g (SS 134202). A tight quality control during the entire production process ensures a product of constant quality on a high level.

### Properties

Properties are listed in the table "Typical data", page 2. SCHWENK *Infracement* is low in chromium. By adding a chromate reducing agent to the cement the amount of water-soluble chromium VI is below 2 mg/kg.

### Application

SCHWENK *Infracement* can be used for the fabrication of concrete according to SS-EN 206 och SS 137003. Further applications include the use as a binder in ready mixed mortars and in ground stabilization. The cement can be used in constructions and concrete parts where for the binder a low alkali content, moderate heat development and/or sulfate resistance (SR3) is required, for example bridges and building foundations.

### Quality assurance

SCHWENK *Infracement* conforms to the requirements stated in SS-EN 197-1, SS 134202 (MH) och SS 134203 (LA) and is subjected to a rigorous quality assurance protocol in our laboratories. Additionally, the cement is regularly controlled by the third-party organization KIWA in Latvia.

### Supplier

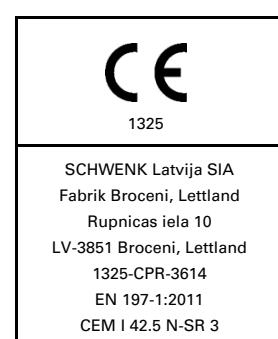
SCHWENK Broceni, Latvia.

### Storage and storage time

SCHWENK *Infracement* must be stored in a dry environment and must be protected from moisture. Storage time is at least two months under dry, moisture free conditions.

### Certification

The product is controlled and certified (CE marked) according to EN 197-1 by Kiva, Latvia. The product has an approval issued by RISE, Sweden regarding the designations MH/LA based on the evaluation report 1161036-01



### Contact

SCHWENK Sverige AB  
c/o Regus, Hyllie Boulevard 34  
S-21535 Hyllie  
Telefon: +46 317550  
[www.schwenk.se](http://www.schwenk.se)

## Typical data

Physical data		Required
Fineness (Blaine)	350 m <sup>2</sup> /kg	-
Density	3.16 g/cm <sup>3</sup>	-
Bulk density	1.2 g/cm <sup>3</sup>	-
Heat development	303 J/g	320 J/g <sup>A</sup>
Setting time	180 min	≥ 60 min <sup>B</sup>
Soundness	1.0 mm	≤ 10 mm <sup>B</sup>
Compressive strength		
1 d	14 MPa	-
2 d	27 MPa	≥ 10 MPa <sup>B</sup>
7 d	43 MPa	-
28 d	55 MPa	≥ 42.5 ≤ 62.5 MPa <sup>B</sup>
Chemical data		Required
Sulfate (SO <sub>3</sub> )	2.7 %	≤ 3.0 % <sup>B</sup>
Alkali content (Na <sub>2</sub> O <sub>ekv</sub> )	0.50 %	≤ 0.60 <sup>C</sup>
Loss of ignition (LOI.)	1.0 %	≤ 5.0 % <sup>B</sup>
Chloride (Cl <sup>-</sup> )	0.04 %	≤ 0.10 % <sup>B</sup>
Chromium (Cr <sup>(VI)</sup> )	< 2.0 mg/kg	< 2.0 mg/kg <sup>D</sup>
C <sub>3</sub> A	2.0 %	≤ 3 % <sup>B</sup>

Requirements according to:

<sup>A</sup> SS 134202:2021 Cement – Ordinär cement med moderat värmeutveckling (MH-cement) – Krav

<sup>B</sup> SS-EN 197-1:2011 Cement – Part 1: Composition, specifications and conformity for common cements

<sup>C</sup> SS 134203:2014 Cement – Sammansättning och fordringar för ordinära cement med låg alkalihalt (LA)

<sup>D</sup> Directive 2003/53/EC of the European Parliament and of the Council (2003)