

# Märker Zement

## Technical Data Sheet

### Portland cement CEM I 52,5 R (wk)

**Märker Portland cement CEM I 52,5 R (wk)** is produced by intergrinding ultra high grade Portland cement clinker with sulfate agents to regulate the setting.

**Märker Portland cement CEM I 52,5 R (wk)** is characterized by very low strength fluctuations. With carefully controlled concrete production, it is therefore possible to have a small safety margin and the required concrete strengths can be achieved economically. Due to its high specific surface area, it has an exceptional water retention capability and therefore does not tend to "bleed". Its high heat of setting means that concreting is also possible during cold periods of the year.

**Composition:** Portland cement clinker, sulfate agents to regulate the setting.

**Properties:** Maximal early strength  
Very high level of hydration heat development  
Minor hardening

**Applications:** Production of:  
Concrete, reinforced and prestressed concrete according to EN 206-1 / German norm DIN 1045-2  
Prestressed concrete according to German norm DIN 1045-1  
Concrete constructions according to ZTV-Ing <sup>(1)</sup>  
High-early strength concrete  
Precast concrete elements

Recommended compressive strength:  $\geq$  C 30/37

In order to achieve unerringly and economically the required fresh and hardened concrete properties the concrete composition is to be determined by an initial type-testing which should take place in good time before the start of concreting.

**Miscibility:** can be mixed with all cements complying with EN 197, but **not** with gypsum or gypsum products.

**Technical standard:** Cement as specified in EN 197

**Quality control:** in-house monitoring, and external quality control in accordance with EN 197 by the Research Institute of the Cement Industry, Düsseldorf, Germany.

**Supply:** in bulk in silo trucks  
**Low-chromate cement** in accordance with REGULATION (EC) No 1907/2006

**Storage:** Cement should be stored under suitable dry conditions protected from moisture and humidity

(1) Additional technical terms of contract and guidelines for civil engineering works  
(German designation: ZTV-ING)

Revised: 08/2015



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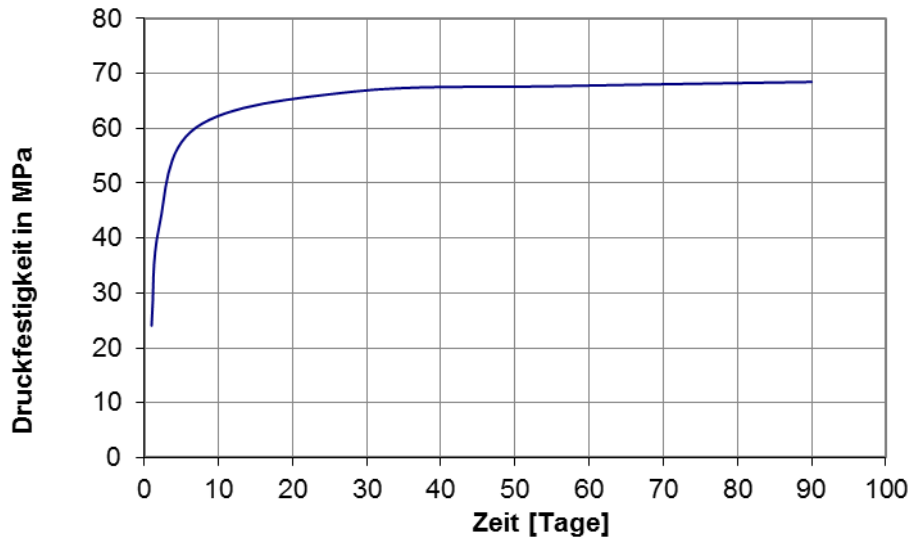
**Email:** [verkauf@maerker-gruppe.de](mailto:verkauf@maerker-gruppe.de)

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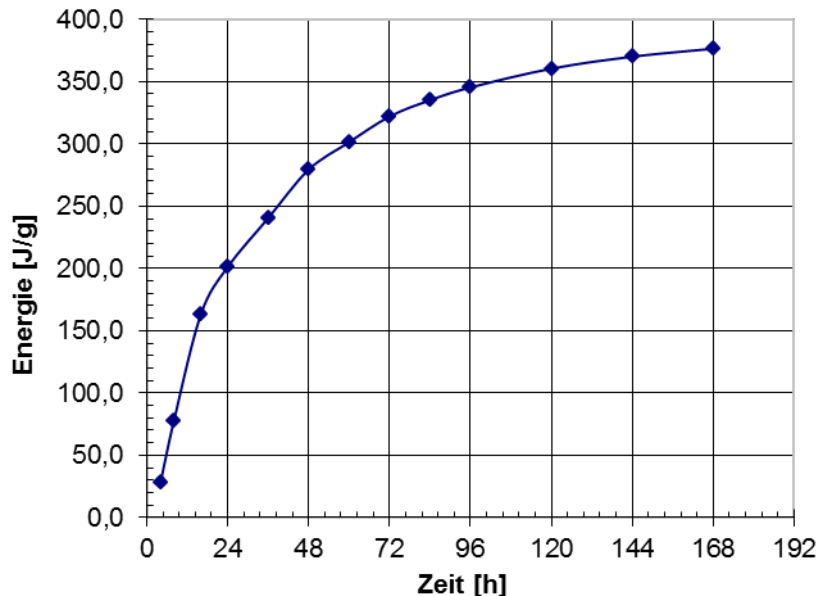
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Development of compressive strength [Druckfestigkeit] based on duration [Tage] = days



Evolution of hydration heat (Energie) based on time [Zeit] = time



Regarding the handling of our products please refer to our current safety data sheets according to EC regulation No. 1907/2006. Any information, product description or reproduction of technical data given in this publication shall be provided without warranty and liability shall be excluded. The data presented in our data sheets are average values based on numerous measurements.

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