

Statistické hodnocení kvality cementu dle EN 197-1

Cement: CEM II/A-LL 52,5 R

Období: Od: **01.02.2025**

Závod: **Mokrá**

Do: **28.02.2025**

Mechanické a fyzikální vlastnosti

| Datum | Měrný povrch | Normální konzistence | Počátek tuhnutí | Konec tuhnutí | Objemová stálost | Pevnost v tlaku | | Pevnost v ohybu | |
|---------------|----------------------|----------------------|-----------------|---------------|------------------|-----------------|-------------|-----------------|------------|
| | | | | | | 2 dny | 28 dní | 2 dny | 28 dní |
| Jednotka | [m ² /kg] | [%] | [min] | [min] | [mm] | [MPa] | [MPa] | [MPa] | [MPa] |
| 03.02.2025 | 584 | 31,6 | 184 | 256 | 1,0 | 37,9 | 64,6 | 7,2 | 8,9 |
| 04.02.2025 | 593 | 31,6 | 173 | 263 | 0,5 | 39,2 | 62,5 | 7,2 | 9,0 |
| 10.02.2025 | 559 | 31,2 | 183 | 247 | 1,0 | 36,6 | 61,8 | 6,8 | 9,0 |
| 12.02.2025 | 556 | 31,6 | 189 | 246 | 0,5 | 37,7 | 63,7 | 6,8 | 8,6 |
| 16.02.2025 | 579 | 31,6 | 174 | 262 | 1,0 | 38,2 | 63,0 | 7,4 | 8,5 |
| 17.02.2025 | 553 | 31,4 | 169 | 268 | 0,5 | 38,2 | 65,5 | 7,2 | 8,1 |
| 24.02.2025 | 560 | 31,6 | 167 | 242 | 1,0 | 38,8 | 66,8 | 7,4 | 8,8 |
| 25.02.2025 | 554 | 31,8 | 178 | 238 | 0,5 | 39,3 | 65,1 | 6,8 | 9,2 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Průměr | 567 | 31,6 | 177 | 253 | 0,8 | 38,2 | 64,1 | 7,1 | 8,8 |
| Max | 593 | 31,8 | 189 | 268 | 1,0 | 39,3 | 66,8 | 7,4 | 9,2 |
| Min | 553 | 31,2 | 167 | 238 | 0,5 | 36,6 | 61,8 | 6,8 | 8,1 |
| Std | 15 | 0,2 | 7 | 10 | 0,3 | 0,8 | 1,6 | 0,2 | 0,3 |
| Četnost | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Norma-min | | | 45 | | | 30,0 | 52,5 | | |
| Norma-max | | | | | 10 | | - | | |

Chemické vlastnosti

| Datum | SiO ₂ | Al ₂ O ₃ | Fe ₂ O ₃ | CaO | MgO | K ₂ O | Na ₂ O | Obsah síranů (jako SO ₃) | Na ₂ O ekv. | Obsah Cl | Ztráta žháním | Nerozpustný zbytek | Vodorozpustný chrom (Cr ⁶⁺) | C ₃ A ve slínku |
|---------------|------------------|--------------------------------|--------------------------------|--------------|-------------|------------------|-------------------|--------------------------------------|------------------------|--------------|---------------|--------------------|---|----------------------------|
| Jednotka | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [%] | [ppm] | [%] |
| 03.02.2025 | 17,86 | 4,57 | 2,91 | 62,48 | 1,37 | 0,72 | 0,10 | 2,99 | 0,57 | 0,032 | --- | --- | --- | 7,05 |
| 04.02.2025 | 17,80 | 4,61 | 2,95 | 62,60 | 1,29 | 0,75 | 0,10 | 2,99 | 0,59 | 0,032 | --- | --- | --- | 7,05 |
| 10.02.2025 | 17,74 | 4,62 | 2,97 | 62,67 | 1,27 | 0,75 | 0,10 | 2,95 | 0,59 | 0,029 | --- | --- | --- | 7,77 |
| 12.02.2025 | 17,73 | 4,61 | 2,97 | 62,89 | 1,25 | 0,77 | 0,10 | 3,04 | 0,61 | 0,037 | --- | --- | --- | 7,77 |
| 16.02.2025 | 17,48 | 4,57 | 2,92 | 61,96 | 1,26 | 0,81 | 0,10 | 2,98 | 0,63 | 0,056 | --- | --- | --- | 7,77 |
| 17.02.2025 | 18,03 | 4,66 | 2,99 | 62,36 | 1,34 | 0,80 | 0,11 | 2,96 | 0,64 | 0,043 | --- | --- | --- | 7,77 |
| 24.02.2025 | 17,68 | 4,61 | 2,94 | 62,53 | 1,25 | 0,84 | 0,11 | 3,03 | 0,66 | 0,069 | --- | --- | --- | 7,77 |
| 25.02.2025 | 17,79 | 4,61 | 2,93 | 62,59 | 1,27 | 0,82 | 0,11 | 3,08 | 0,65 | 0,057 | --- | --- | --- | 7,77 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Průměr | 17,76 | 4,61 | 2,95 | 62,51 | 1,29 | 0,78 | 0,10 | 3,00 | 0,62 | 0,044 | --- | --- | --- | 7,59 |
| Max | 18,03 | 4,66 | 2,99 | 62,89 | 1,37 | 0,84 | 0,11 | 3,08 | 0,66 | 0,069 | --- | --- | --- | 7,77 |
| Min | 17,48 | 4,57 | 2,91 | 61,96 | 1,25 | 0,72 | 0,10 | 2,95 | 0,57 | 0,029 | --- | --- | --- | 7,05 |
| Std | 0,15 | 0,03 | 0,03 | 0,25 | 0,04 | 0,04 | 0,00 | 0,04 | 0,03 | 0,014 | --- | --- | --- | 0,31 |
| Četnost | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 8 |
| Norma-min | | | | | | | | | | | | | | |
| Norma-max | | | | | | | | 4,0 | | 0,10 | | | | |

V Mokré dne : 08.04.2025

Ing. Vojtěch Smutný - vedoucí útvaru řízení jakosti

Technická podpora prodeje:
e-mail: technicka.podpora@heidelbergmaterials.com
tel: +420 544 122 544