

**Dyckerhoff Well Cement Class G - Black Label**

Standard notation: API Spec 10A Class G Grade HSR

All shipments from **01.01.2021** to **01.04.2021**

Chemical composition:	Typical data	Specification API Spec 10A
MgO, %	0,9	≤ 6,0
SO ₃ , %	2,7	≤ 3,0
Loss on ignition, %	1,4	≤ 3,0
Insoluble residue, %	0,56	≤ 0,75
Tricalcium silicate (C3S), %	51	≥ 48 / ≤ 65
Tricalcium aluminate (C3A), %	2,5	≤ 3
Since TM is 0,80 (> 0,64):		
(C4AF + 2 x C3A), %	22,3	≤ 24
Na ₂ O-equivalent, %	0,63	≤ 0,75

Physical properties:**(44% BWOC mix water, neat)**

Specific Surface Area (Blaine), m ² /kg	323	NR
Absolute grain density, g/cm ³	3,18	NR
Slurry density, kg/l	1,91	NR
Free Fluid, %	1,9	≤ 5,9
Compressive strength 8h/38°C, psi	520	≥ 300
Compressive strength 8h/60°C, psi	2160	≥ 1500

Thickening Time (TT), Neat

API Sch. 5 (Depth: 8.000ft, BHCT: 52°C)

Consistency after 30 min, Bc	14	≤ 30
Time to 30 Bc, min	68	≥ 30
Thickening time (Time to 100 Bc), min	101	≥ 90 / ≤ 120

Average results of conformity testing in accordance with API Spec 10A, 25th Ed.(2019), and ISO 10426-1:2009.

Dyckerhoff Well Cement Class G - Red Label

Standard notation: API Spec 10A Class G Grade HSR

All shipments from **01.01.2021** to **01.04.2021**

Chemical composition:	Typical data	Specification API Spec 10A
MgO, %	0,9	≤ 6,0
SO ₃ , %	2,7	≤ 3,0
Loss on ignition, %	1,4	≤ 3,0
Insoluble residue, %	0,56	≤ 0,75
Tricalcium silicate (C3S), %	51	≥ 48 / ≤ 65
Tricalcium aluminate (C3A), %	2,5	≤ 3
Since TM is 0,80 (> 0,64):		
(C4AF + 2 x C3A), %	22,3	≤ 24
Na ₂ O-equivalent, %	0,63	≤ 0,75

Physical properties:**(44% BWOC mix water, neat)**

Specific Surface Area (Blaine), m ² /kg	323	NR
Absolute grain density, g/cm ³	3,18	NR
Slurry density, kg/l	1,91	NR
Free Fluid, %	1,9	≤ 5,9
Compressive strength 8h/38°C, psi	520	≥ 300
Compressive strength 8h/60°C, psi	2160	≥ 1500

Thickening Time (TT), Neat

API Sch. 5 (Depth: 8.000ft, BHCT: 52°C)

Consistency after 30 min, Bc	14	≤ 30
Time to 30 Bc, min	68	≥ 30
Thickening time (Time to 100 Bc), min	101	≥ 90 / ≤ 120

Average results of conformity testing in accordance with API Spec 10A, 25th Ed.(2019), and ISO 10426-1:2009.