

# Certificate

Nordic certification of road marking materials

Date of issue: 2018-04-26, suppl 2018-10-01

Material ID: TPPW 15-08 SE

Product description	
Producer:	Geveko Markings www.geveko-markings.com
Material name:	PREMARK
Material type:	Thermoplastic preformed <input checked="" type="checkbox"/> Type I <input type="checkbox"/> Type II <input type="checkbox"/> Friction
Colour of material:	White
Valid for thickness, base material [mm]:	3
Drop on aggregate:	Geveko Markings, UCme 850-180 25%
Application method, base material:	Manually w/heater

Application on test site			
Year of application:	2015	Road surface temperature [°C]:	25
Month of application:	May	Ambient temperature [°C]:	12
Application method:	Manually w/heater	Relative humidity [%]:	60
Thickness at application [mm]:	3.0	Wind speed [m/s]:	5

Test field characteristics			
Test site:	Rte E45, Sunne, Sweden	AADT:	4000
Road surface type:	Thin asphalt overlay	Speed limit [km/h]:	90
Year of installation:	2012	Lane width [m]:	3.75
Roughness class (EN 1824):	RG3	Heavy vehicles [%]:	12
Climatic class (EN 1824):	C3	Studded tyres (winter) [%]:	80
Meteorological data		Year 1	Year 2
Annual average temperature [°C]:		5.9	6.3
Average summer temperature (Apr-Sep) [°C]:		11.5	12
Average winter temperature (Oct-Mar) [°C]:		0.4	0.6
Annual precipitation [mm]:		767	499
Number of sun hours per month [h]:		159	154
Number of weeks with snow:		11	9
Number of times the snow plough has operated:		39	34
Number of times the road has been salted:		61	108

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Certification			
Achieved roll-over class:	P4	Valid in countries:	Norway, Sweden

Performance requirements and results		
Performance parameter	Requirement	Result*
Coefficient of retroreflected luminance, $R_L$ dry [ $\text{mcd}/\text{m}^2/\text{lx}$ ]:	150	152
Coefficient of retroreflected luminance, $R_L$ wet [ $\text{mcd}/\text{m}^2/\text{lx}$ ]:	-	-
Luminance coefficient under diffuse illumination, $Q_d$ [ $\text{mcd}/\text{m}^2/\text{lx}$ ]:	130	170
Friction, [PFT units]:	0.52	0.82
Chromaticity coordinates, daytime, x, y:	**	0.3320, 0.3503
Chromaticity coordinates, night-time, x, y:	-	-, -

\*) Result in achieved roll-over class

\*\*\*) White markings: according to EN 1436. Yellow markings: daytime according to class Y1 in EN 1436, night-time according to ASTM D6628.

Roll-over classes, EN 1824			Type II profile/pattern		
Roll-over class	Number of wheel passages	Climatic cycles	Profile/pattern:	Coverage [%]:	
P0	≤ 50 000	1	-	-	-
P1	Between 50 000 and 60 000	1			
P2	100 000 ± 20 %	1			
P3	200 000 ± 20 %	1			
P4	500 000 ± 20 %	1			
P5	1 000 000 ± 20 %	2			
P5.5	1 500 000 ± 20 %	-			
P6	2 000 000 ± 20 %	-			

The certification is valid until the material is changed or until the requirements are changed. Further information can be found in the document *Nordic certification system for road marking materials* which is available at [www.vti.se](http://www.vti.se). The certificate is issued by Ramböll and VTI.

Signature

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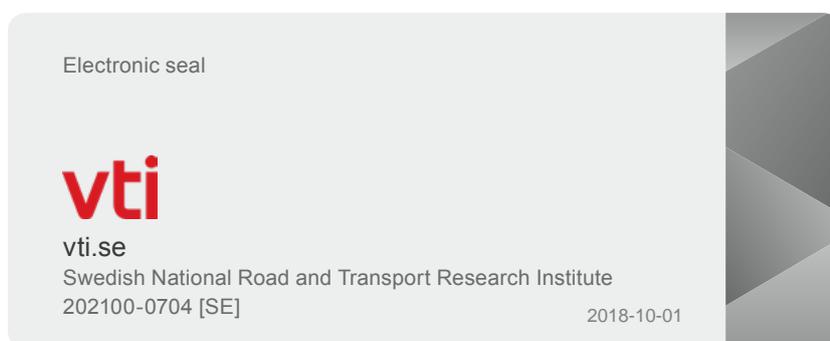
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