



**List of prices  
Laboratory testing  
Road Material  
2020**



**Pricelist 2020**

25 March 2020

The laboratory is accredited according to SS-EN ISO/IEC 17025

\* in following lists means accredited method

Discount for large amount of samples possible after agreement.

VTI performs testing impartially and client data (incl. results) are confidential according to EN ISO/IEC 17025:2017 and according to law- and authority requirements.

[Here can you find list of Methods and versions](#)

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More info: <https://www.vti.se/en/research-areas/road-material-laboratory/>

## Unbound materials/Aggregates

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Accredited method	Property/Method	Method reference	Price, excl. VAT
	Sample preparation (subsampling, crushing etc.)		1 000 SEK/h
*	petrographic description –rock type <a href="#">[Contact: Fredrik Hellman, +46 13 204277, fredrik.hellman@vti.se]</a>	SS-EN 932-3 (accred.) TDOK 2014:0575 (not accred.)	Ask for price
*	<b>Grain size distribution, sieving</b>		
*	- material <16 mm	SS-EN 933-1	1 800 SEK
*	- base layer, 0/32 mm, 0/45 mm	SS-EN 933-1; TDOK 2014:0145	2 900 SEK
*	- sub base layer, "coarse material"	SS-EN 933-1; TDOK 2014:0145	3 400 SEK
	Grain size distribution, laserdiffraction [10 nm – 2 mm]	VTI-method	2 900 SEK
*	FlakenessIndex	SS-EN 933-3	2 500 SEK
*	Shape Index	SS-EN 933-4	1 800 SEK
*	Determination of crushed and broken surfaces in coarse aggregate particles	SS-EN 933-5	2 500 SEK
*	Assessment of fines – Sand equivalent test	SS-EN 933-8	1 900 SEK
	Methylene Blue Value	SS-EN 933-9	Ask for price
*	micro-Deval	SS-EN 1097-1	3 800 SEK
*	Los Angeles	SS-EN 1097-2	3 800 SEK
*	Water content (additional for extra samples, a piece 300 SEK)	SS-EN 1097-5	1 100 SEK
*	Particle density	SS-EN 1097-6	1 500 SEK
*	Waterabsorption and Particle density	SS-EN 1097-6	3 100 SEK
	Polished Stone Value (PSV), <i>Performed by accredited subcontractor laboratory</i>	SS-EN 1097-8	3 200 SEK
*	Nordic Ballmill, incl particle density	SS-EN 1097-9	3 900 SEK
*	Resistance to freezing and thawing	SS-EN 1367-1	4 400 SEK
*	Resistance to freezing and thawing in the presence of salt	SS-EN 1367-6	4 400 SEK
*	Laboratory reference density and water content - Proctor compaction	SS-EN 13286-2	Ask for price
	Maximum density with vibrating table	VVMB 607/ASTM D4253-83	Ask for price
	Cyclic load triaxial test for unbound mixtures	SS-EN 13286-7	Ask for price
	Frost heave	VVMB 301	Ask for price
	Capillarity	VVMB 24	Ask for price
	Test of Railway ballast		Ask for price
	Mica Content (in fractions 0,125/1 mm)	TDOK 2014:0144	Ask for price

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**Asphaltmix**

Andreas Waldemarson +46 13 20 41 94, andreas.waldemarson@vti.se

Accredited method	Property/Method	Method reference	Price, excl. VAT
	Sample preparation		1 000 SEK/h
	Specimen preparation, (Marshall/gyratoric compaction/test slabs)	e.g. SS-EN 12697-30 Accr.	Ask for price
*	Soluble binder content and Particle size distribution	SS-EN 12697-1 and SS-EN 12697-2	3 800 SEK
*	Determination of the maximum density, per specimen	SS-EN 12697-5	900 SEK
*	Determination of bulk density of bituminous specimens, per specimen	SS-EN 12697-6	900 SEK
*	Determination of void characteristics of bituminous specimens, per specimen	SS-EN 12697-8 incl 12697-5 and 12697-6	1 800 SEK
*	Affinity between aggregate and bitumen, Rolling bottle	SS-EN 12697-11	4 300 SEK
*	Water sensitivity of bituminous specimens	TDOK 2017:0650 SS-EN 12697-12	9 200 SEK
	Winter conditioning -curing in solution of salt and freeze thaw cycles	VTI-method	Ask for price
*	Water content	SS-EN 12697-14	Ask for price
*	Abrasion by studded tyres, Prall	SS-EN 12697-16 <i>FAS 471 -not accred.</i>	8 100 SEK
	Wheel tracking test	SS-EN 12697-22, Extra-large size device	Ask for price
*	Indirect tensile strength of bituminous specimens, per specimen	SS-EN 12697-23	1 500 SEK
	Resistance to fatigue, 12 specimens	VTI Notat 38-95, SS-EN 12697-24 appendix E	30 000 kr
*	Cyclic compression test, creep test, per specimen (Additional costs for thin layer specimen: 3 200 SEK)	FAS 468, SS-EN 12697-25 method A	2 300 SEK
*	Stiffness, per specimen	FAS 454, SS-EN 12697-26 appendix C	2 400 SEK
	Sheartest (3 samples at 8 frequencies and 4 temperatures)	VTI-method	13 000 SEK
*	Determination of the dimensions of bituminous specimen	SS-EN 12697-29	Ask for price
*	Determination of the thickness of a bituminous pavement	SS-EN 12697-36	Ask for price
	Marshall stability test and plastic flow value, per specimen	ASTM D1559	2 500 SEK
	PAH-content, -testing package incl extraction, chemical analysis and calculation, <i>chemical analysis is performed by subcontractor laboratory</i>		4 600 SEK

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**Binder, bitumen**

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Accredited method	Property/Method	Method reference	Price, excl. VAT
	Sample preparation		1 000 SEK/h
*	Bitumen recovery: Rotary evaporator	SS-EN 12697-3	4 800 SEK
*	Determination of needle penetration	SS-EN 1426	1 000 SEK
*	Determination of softening point - Ring and Ball method	SS-EN 1427	1 000 SEK
*	Determination of solubility	SS-EN 12592	1 400 SEK
*	the Fraass breaking point	SS-EN 12593	3 000 SEK
*	kinematic viscosity	SS-EN 12595	1 900 SEK
*	dynamic viscosity by vacuum capillary	SS-EN 12596	1 900 SEK
*	density and specific gravity - Capillary-stoppered pyknometer method	SS-EN 15326	1 600 SEK
*	Determination of flash and fire points - Cleveland open cup method	SS-EN 2592	1 900 SEK
*	the resistance to hardening under the influence of heat and air: RTFOT Method	SS-EN 12607-1	1 700 SEK
	complex shear modulus and phase angle - Dynamic Shear Rheometer (DSR)	SS-EN 14770	Ask for price
	the flexural creep stiffness - Bending Beam Rheometer (BBR)	SS-EN 14771	Ask for price
*	elastic recovery of modified bitumen	SS-EN 13398	2 800 SEK
*	storage stability of modified bitumen	SS-EN 13399	1 200 SEK
*	Determination of the tensile properties of modified bitumen by the force ductility method and Determination of deformation energy	SS-EN 13589	5 600 SEK
*	Complete package of analysis for penetration bitumen (According to specification EN 12591) that includes EN 1426, EN 1427, EN 12607-1, EN ISO 2592, EN 12592, EN 12593, EN 12595, and EN 12596		17 000 SEK
*	Complete package of analysis for polymeric modified bitumen, PMB (According to specification EN 14023) that includes EN 1426, EN 1427, EN 12593, EN ISO 2592, EN 13398, EN 13399, EN 13589 and EN 12607-1		27 000 SEK

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**De-icing**[Jijing Zhu +46 13 20 42 56, jijing.zhu@vti.se](mailto:jijing.zhu@vti.se)[Andreas Waldemarson +46 13 20 41 94, andreas.waldemarson@vti.se](mailto:andreas.waldemarson@vti.se)

Accredited method	Property/Method	Method reference	Price, excl. VAT
	Sample preparation		1 000 SEK/h
	Resistance to de-icing fluids, Binders accord. to LFV specifikation	VTI/LFV Metod 1-98	7 200 SEK
*	Resistance to de-icing fluids, Asphalt mixtures	SS-EN 12697-41	14 700 SEK
*	Resistance to de-icing fluids, Core samples	SS-EN 12697-41	12 600 SEK

**Bridge isolation**[Björn Kalman +46 13 20 42 55, bjorn.kalman@vti.se](mailto:bjorn.kalman@vti.se)

Accredited method	Property/Method	Method reference	Price, excl. VAT
	Sample preparation		1 000 SEK/h
	Testing of bridge isolation och primer		Ask for price

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