



**List of prices  
Laboratory testing  
Road Material  
2018**



**Pricelist 2018**

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.

All results are confidential

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

## Unbound materials/Aggregates

Håkan Arvidsson, +46 13 20 43 57, [hakan.arvidsson@vti.se](mailto:hakan.arvidsson@vti.se)

Accredited method	Property/Method	Method reference	Price, excl. VAT
	Sample preparation (subsampling, crushing etc.)		1 000 SEK/h
*	petrographic description –rock type [Contact: Fredrik Hellman, +46 13 204277, <a href="mailto:fredrik.hellman@vti.se">fredrik.hellman@vti.se</a> ]	SS-EN 932-3	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

**Asphaltmix**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
	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	TRVMB 704 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
*	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

**Binder, bitumen**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
*	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		
*	Determination of deformation energy	SS-EN 13589 och SS-EN 13703	5 600 SEK
*	Complete package of analysis for penetration bitumen		17 000 SEK
*	Complete package of analysis for polymeric modifierad bitumen, PMB		26 000 SEK

**De-icing**

[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
	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