

Baustofflabor Hamburg

Dipl.-Ing. Labryga GmbH



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Fa.
ORGKHIM CJSC
Management Company Trade House
Herrn Dr. Ilichev
29-d Gagarin Av.
603057 Nizhny Novgorod
Russina Federation

Anerkannt nach RAP Stra 10
für die Fachgebiete
A1, A3, A4, B2, B3, B4, D3, D4, F2,
F3, F4, G3, G4, I1, I2, I3, I4
Anerkennung als Prüfstelle gemäß
ZTV M 02, Stufe 1 und 2
NB 1742

Laboratory number 671/13-phase 3

Hamburg 09.12.2013

Client: ORGKHIM CJSC
29-d Gagarin Av.
603057 Nizhny Novgorod
Russian Federation

Order: Testing of bitumen samples with and without addition
of AFTISOTDOR according to order

Material: 50/70 ex German refinery and AFTISOTDOR
(adhesion agent)

Entrance of material: 10.04.2013

1. Generell information to the Test Order

Company ORGKHIM CJSC ordered the Baustofflabor Hamburg with the modification of a german 50/70 paving bitumen with 0.4% AFTISOTDOR and to test this sample in comparison to the same paving bitumen 50/70 without AFTISOTDOR according to the offer and the order from ORGKHIM company. The ordered tests includes the test of rut resistance of asphalt hot mix with bitumen with and without AFTISOTDOR. The rut resistance test is made with a steel wheel in a water basin at +50°C.

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Amtsgericht
Hamburg HRB 93513
St.-Nr. 47/705/00104



2. Test Results

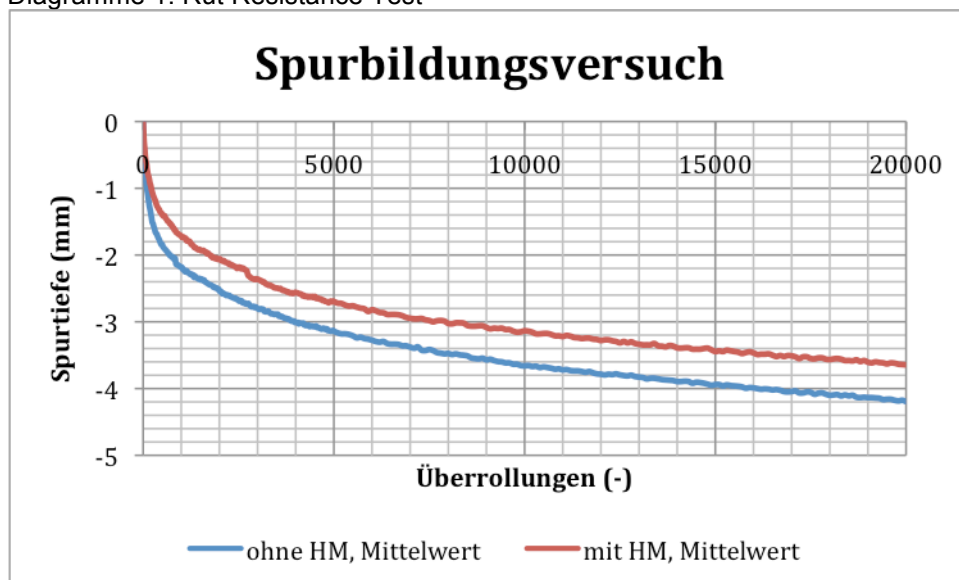
The following tables show the test results of the tested 50/70 bitumen with and without addition of 0.4 m.-% AFTISOTDOR.

Table 1: Test Results 50/70 with and without AFTISOTDOR on a typical AC 16 BS according to German standard

Properties	Unit	Testmethod	50/70 + 0.4 m.-% AFTISOT-DOR Actual Value	50/70 without AFTISOT-DOR Actual Value	Specified Value
rut depth after 20000 wheel passes at +50°C, steel wheel, water basin	mm	TP A-StB,part rut test, determination of rut depth in water	3,6	4,2	≤ 3,5*
proportional rut depth after 20000 wheel passes, steel wheel, water basin	%	TP A-StB,part rut test, determination of rut depth in water and DIN EN 12697-22	6,0	7,0	-

* Specified values are based on standards or on empirical datas, like recommendations from Hamburg Government.

Diagramme 1: Rut Resistance Test



3. Evaluation of the test results of phase 3

The conducted tests show clearly, that the addition of the product AFTISOTDOR increases the adhesion between aggregate and bitumen. The testing of the rut resistance according to the recommendations of Hamburg Government including the water sensitivity of slab specimen with and without addition AFTISOTDOR in the used 50/70 bitumen shows an increase of the rut resistance. This increase is nearly an increase to fulfill the demand of the Hamburg Government for binder courses for high trafficked roads like highways and industrial roads and harbour roads.

Prüfstellenleiter

Dr.-Ing. Burghard Herr

