Building Material Test Centre – Rhineland

Chemical & Physical Test and Research Laboratory for construction and industrial clients.

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Test Report Registration No:24-1205/06 cph-8120

Applicant	:	LEYCO Chemische Leyde GmbH Industriestrasse, 155 50999 Köln.
Subject	:	Test on the effect of the product Leyco-Slick on the compressive strength of concrete
Date of Test	:	16.06.2006.
Instruction	:	12.05.2006.
Pages	:	2
Appendices	:	- / -

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1. ASSIGNMENT

on the 12.05.2006 we were asked by the applicant LEYCO Chemische Leyde GmbH Industriestrasse, 155 50999 Köln

to carry out a test on the product

Leyco-Slick (called Concrete Pump Primer)

to find its effect on the compressive strength of concrete.

2. TEST: INTRODUCTION

The sample of the product Leyco-Slick in a quantity of 227gr was delivered to the undersigned.

It had the appearance of a white powder, and according to the instructions of the applicant it is to be mixed in water and enhances the throughput of a concrete pump's pipes.

3. ESTABLISHING THE TEST PARAMETERS; TEST

According to the guidelines the product Leyco-Slick in a quantity of 2 ounces/yd 3 should be used with fresh concrete.

This is equivalent to a quantity of 76 g/m^3 for the aforementioned fresh concrete.

The establishment of the test parameters (a cube of 150mm side dimensions), storage and testing followed according to the principles laid out as noted below:

DIN EN 480-1 Additives for concrete, mortar and moulded mortar – test procedure: Part 1: Concrete reference and mortar reference for tests; March 1998

DIN EN 12390-2 Test for cured concrete Part 2: Establishment and storage of test samples for resistance tests; June 2001

DIN EN 12390-3 Test for cured concrete Part 3: compressive strength of test samples: April 2002

The results of the reference concrete together with the findings on compressive strength are set out in the table 1 below.

	Table 1			
Test No.	Raw material/ compound	Quantity in kg/m ³		
		control	test	
1	Portland cement CEM I 32.5R	350	350	
2	Aggregate (Rheinkeis/Rheinsand) 0/32mm	1780	1780	
3	Water	196	196	
4	Water/cement ratio	0.56	0.56	
5	Leyco Slick	-	0.076	
6	Compressive Strength in N/mm ² (Mpa)	36.7	38.8	
	28 days water cure	38.2	37.3	
		38.5	37.7	
	Average	37.8	37.9	

No difference in the compressive strength between the test concrete using Leyco-Slick and the control concrete was established.

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