

WATER REGULATIONS ADVISORY SCHEME (WRAS).

**TESTING OF NON-METALLIC MATERIALS FOR USE WITH DRINKING
WATER (BS 6920 : 2000)**

AUDIT TEST REPORT

Product : HA Soil and HA Soil Cat AF
Report Reference : M 104665/C
Page 1 of 4 Pages.

De Neef UK Ltd
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Birkenhead
Wirral
CH41 3PR

Report Date : 5th January 2010

Executive Summary - samples of this product have been tested to the Audit Test requirements of the Water Regulations Advisory Scheme (WRAS)/BS 6920:2000 for use with Cold Water.

A copy of this report should be submitted to the Water Regulations Advisory Scheme (WRAS) for further advice concerning this product.

Conformity with the Audit Test requirements of the WRAS will be confirmed by the Scheme.

NOTES.

1. The results given in this report relate only to the items tested, and not necessarily to the bulk from which they were taken.
2. This test work was undertaken in the UKAS accredited Spencer House laboratory of Thames Water Utilities Ltd., UKAS registration number 0677, unless otherwise stated.
3. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
4. This test report shall not be reproduced, except in full, without our prior written approval.

**TESTING OF NON-METALLIC MATERIALS FOR USE WITH DRINKING WATER.
WATER REGULATIONS ADVISORY SCHEME TESTS OF EFFECT ON WATER
QUALITY (BS 6920:2000).**

0. INTRODUCTION.

The samples of the product referred to in this report have been tested in accordance with the methods of the Water Regulations Advisory Scheme (WRAS) Tests of Effect on Water Quality/BS 6920-2:2000 "Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water : Methods of Test". **The testing undertaken is in accordance with the Water Regulations Advisory Scheme (WRAS) letter dated 6th October 2009, approval number 0606506.**

1. TEST SAMPLES.

General composition of product	Polyurethane Injection Resin with Accelerator	
Trade name/designation	HA Soil and HA Soil Cat AF	
Material manufacturer	De Neef UK Ltd	
Date of manufacture/production	Part A: 11 th December 2008	Part B: 31 st July 2009
Production batch numbers	Part A: 4850	Part B: 5931
Samples prepared by	WQC Staff	
Submitting organisation	De Neef UK Ltd	
Date of receipt of test samples	23 rd November 2009	
Method of packaging	In product containers	
Condition on receipt	Satisfactory	
Laboratory storage before test	Ambient temperature (21±4)°C	
Description of	test article shape	Sanded glass panel Rectangular
Appearance of a test article	colour surface finish opacity	Brown Smooth Opaque
Surface area of one article (mm ²)	1000mm ²	
Number of articles to give a surface area of 1000mm ²	1	
Calibration mark of the test vessel/container in litres	1	
Extraction temperature used for test 2	(23±2)°C	

1.1 SITE APPLIED PRODUCTS.

Typical uses of the product	Injection grout used to increase the load bearing capacity of loose soils.
Batch numbers of materials used	Part A: 4850 Part B: 5931
Appearance of product/component parts before mixing	Part A: Brown Part B: Clear
Method of test sample preparation	Parts A & B were hand mixed and brush applied to a 1000mm ² area on a sanded glass panel
Mix ratio (mass : mass)	99:1 (Part A:Part B)
Number of coats used	One
Coat 1 = Curing (time and temperature)	7 days at (7±2)°C
Location of sample preparation	Spencer House Laboratory
Total curing (time and temperature)	7 days at (7±2)°C

[method code LP/R/MT01]

2. ODOUR & FLAVOUR OF WATER TEST

Temperature of extraction :(23±2)°C

Date test started : 08.12.09.

The extracts from the samples were compared with the procedural blank test waters by a panel of 3 testers. The following results were obtained for the test extracts.

Extract	Test water	Test	Descriptors	Threshold dilutions
Sample 1	Chlorine free	Odour	Sweet/Chemical/Chemical	
		Flavour	--	--
First	Chlorinated	Odour	Sweet/Chemical/Chemical(Soapy)	
		Flavour	--	--
Final	Chlorine free	Odour	None	
		Flavour	None	<1
	Chlorinated	Odour	None	
		Flavour	None	<1

[method code LP/R/MT02]

COMMENT. On the basis of these results the samples of this product have been found **to conform** with the requirements of BS 6920-1 : Clause 4 when extracted at 23°C.

CONCLUSIONS.

The samples of this product have been tested in accordance with the Audit Test requirements of the Water Regulations Advisory Scheme (WRAS) for use with cold but not hot water.

A copy of this report should be submitted to the Water Regulations Advisory Scheme (WRAS) for further advice concerning this product.

NOTE : materials and products intended for use by a public water supply company in the preparation or conveyance of water may need to satisfy more comprehensive toxicological requirements as specified by the Drinking Water Inspectorate. These additional requirements are necessary to ensure water company usage complies with Regulation 31 of the Water Supply (Water Quality) Regulations 2000.

NO OTHER TESTS WERE UNDERTAKEN ON THIS PRODUCT.

NOTES -

1. The results specified in this report relate only to the sample(s) submitted for testing. Any changes in the nature or source of ingredients and the process of manufacture or application could affect the suitability of this product for use in contact with drinking water.
2. We would draw to your attention that reports issued by the accredited test laboratories do not of themselves constitute approval by the Water Regulations Advisory Scheme (WRAS) or the test laboratory. Only a letter from the Scheme, citing a Directory Reference Number, can be regarded as indicating approval.

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