

WATER REGULATIONS ADVISORY SCHEME (WRAS).

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

**AUDIT TEST REPORT**

Product: E6029  
Report Reference: M 105603/B  
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Dexine Rubber Technologies Ltd  
Jape 2 Business Centre  
Shawclough  
Rochdale  
OL12 6BZ

Report Date: 2<sup>nd</sup> January 2014

**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 3<sup>rd</sup> October 2013, approval number 0808510.**

## **1. TEST SAMPLES.**

General composition of product	<b>EPDM Rubber</b>	
Material trade name/ designation	<b>E6029</b>	
Material manufacturer / site	Dexine Rubber Technologies Ltd / Rochdale, UK	
Date of manufacture/ production	3 <sup>rd</sup> October 2013	
Method of manufacture	Compression moulded	
Production batch numbers	LAB BATCH	
Shore hardness	70 °Sh	
Submitting organisation	Dexine Rubber Technologies Ltd	
Date of application	15 <sup>th</sup> October 2013	
Date of receipt of test samples	18 <sup>th</sup> October 2013	
Method of packaging	Wrapped in paper	
Condition on receipt	Satisfactory	
Laboratory storage before test	Ambient temperature (21±4) °C	
Description	test article shape dimensions in-radius	Sheet Rectangular 120mm x 59mm x 2mm 1.0mm
Appearance of article	colour surface finish opacity	Black Matt Opaque
Surface area of one article (mm <sup>2</sup> )	14876	
Number of articles to give a surface area to volume ratio of 15000mm <sup>2</sup> to 1L of test water	1	
Calibration mark of the test vessel/container in litres	1	
Extraction temperature used for test 2	(23±2) °C	

## 2. ODOUR & FLAVOUR OF WATER

Temperature of extraction: (23±2) °C

Date test started: 29.10.13

The extracts detailed below 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
First	Chlorine free	Odour	None	
		Flavour	None	<1
	Chlorinated	Odour	None/Musty/None	
		Flavour	---	---
Final	Chlorine free	Odour	---	
		Flavour	---	---
	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.

#### 4. GROWTH OF AQUATIC MICROORGANISMS

Temperature of extraction: (30±2) °C

Date test started: 22.10.13

Container	Mean Dissolved Oxygen Difference (MDOD) in mg/L
<b>Test product (weeks 5 to 7)</b>	<b>0.0</b>
Negative reference (glass) (weeks 5 to 7)	-0.3
Positive reference (wax) (weeks 5 to 7)	6.8
Special positive reference Bacteriocidal/Bacteriostatic effect	n/a n/a
Negative control - Mean dissolved oxygen concentration (weeks 5 to 7)	8.4

[method code LP/R/MT04]

COMMENT. On the basis of these results the sample of this product has been found **to conform** with the requirements of BS 6920-1 : Clause 6.

At the end of this test the test pieces showed no changes in colour and appearance.

## 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 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 wholesome 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. Applicants will be formally notified of their WRAS approval number by the Scheme if their application has been successful.



Helen Bala  
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