



مختبر علوم التربة لفحص المواد GEOSCIENCE TESTING LABORATORY

ANALYSIS REPORT ON NON TOXICITY

(POLY PROPYLENE CO-POLYMER) AND (POLY ETHYLENE CROSS LINKING) PIPES WITH DZR BRASS ELBOW AND ADAPTOR FITTINGS

Lab References:

Report No. : R1/2b09-236 Report Date : 02/02/2009
Request No. : Q1/2b09-236 Sample No. : S1/2b09-236

Client References:

Product. : Vialli PPR, Vialli PEX and DZR fittings
Project Name : POTABILITY TEST (Safety using for Drinking Water)
Client : MINCOM TRADING
Consultant : MAZAYA CONSULTING ENGINEERS
Supplier : VIALLI Group – Germany

I. Appearance of Water

5 cm sample was cut from the two plastic samples namely Vialli PPR, Vialli PEX Pipes and DZR fittings. The metal parts were removed and became separate parts. The specimen was submerged altogether to the chlorine-free test water maintained at temperature 50 °C for 24 hrs.

After 24 hrs water portion was removed and tested for colour and turbidity using spectrophotometric method.

Extract Result :

Turbidity : < 21 FAU
Colour : < 15 mg/L Pt-Co

Remarks: Values obtained for turbidity and colour are both below the detection limit and meets the non-toxicity requirements for this test .



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II. Extraction of Metals

5 cm sample was cut from the two plastic samples, Vialli PPR, Vialli PEX Pipes and DZR fittings. The metal parts were removed and became separate parts. The specimen was submerged altogether to the chlorine-free test water maintained at temperature 50 °C for 24 hrs.

After 24 hrs water portion was removed and tested for presence of metals using Atomic Absorption Spectrophotometry and ICP-OES. The water extract was acidified prior to testing using concentrated HNO₃ (5ml HNO₃ / 1000ml extract)

Table 1. Metal Analysis results

| PARAMETER | DETECTION LIMIT | RESULT (mg/L) FINAL EXTRACT |
|-----------|-----------------|--------------------------------|
| CADMIUM * | 0.02 | < 0.02 |
| CHROMIUM* | 0.20 | < 0.20 |
| IRON | 0.10 | < 0.10 |
| LEAD * | 0.15 | < 0.15 |
| MANGANESE | 0.03 | < 0.03 |
| NICKEL * | 0.18 | < 0.18 |

ND = Not Detected

Remarks: **Tested items, Vialli PPR, Vialli PEX pipes and DZR fittings meet and exceed the non-toxicity requirements test for drinking water purpose.**

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TESTING DATE : 10/02/2009
SAMPLING REPORT NO. : CHSC09-0073
SAMPLING METHOD : GRAB
SAMPLE PREPARATION : BS : 6920 -2.1 2000
TEST METHOD : APPEARANCE OF WATER : BS 6920-2.2.3 2000
: EXTRACTION OF METALS: BS 6920-2.2.6 2000
TEST METHOD VARIATION : NONE
TESTED BY : AFH / RTG / CAM / ART
REMARKS : NONE

* Results relates only to the items tested

* Reports shall not be reproduced (except in full) without written approval of the laboratory.

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