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ANALYSIS REPORT

(Industrial Technical Support Service)

Report Number: 45924173 -125.05-1167/4255
Report Date: 27.06.2016
Applicant: Clever Polimer ve Yapı Kimyasalları A Ş
Applicant's Address: Atatürk Mah. Ekincioğlu Sok. No: 2 Ataşehir / ISTANBUL
Subject: Effect of Clever 2K W PU Insulating Material sample on Water;
Compliance to the BS 6920 - 1, 2.6: 2000 Standard

Results presented in this report are limited to the samples examined

Certified by

[imza]

Associated Prof. Dr. Özgen ERCAN
Industrial Services

Environment and Cleaner Production Institute

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Test and/or test results, expanded measurement uncertainties (if there is any), and test methods are given in the following pages, the complementary part of this report.

This report consisted of 4 pages is issued in 2 original copies (1 original copy for the applicant, 1 original copy for the archives of the Institute).

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Sample: Clever 2K W PU Insulating Material Number of Samples: 1 Sample Brought by: The applicant Sample Accepted in: Plastic container	Date of Expiry: Registered Under Number: 168/348/1 Date and Time Accepted: 08.06.2016 Date of Analysis: 08-24.06.2016
Witness sample details: () returned to applicant	(x) witness sample available () no witness sample

TUBITAK Marmara Research Center received a letter of request regarding the request of analysis of the effect of Clever Polimer ve Yapı Kimyasalları A.Ş., Clever 2K W PU Insulating Material on water, and registered it under number 3585.

In the attachment of the letter of analysis request one (1) sample of Clever 2K W PU Insulating Material was brought to Environment and Cleaner Production Institute, Marmara Research Center, TUBITAK MAM.

Testing the compliance of the contact water samples, prepared according to the BS 6920-1, 2.6 Standard, to the BS 6920-1, 2.6 Standard and the parameters given in the Table, and to the maximum threshold limit values was requested to identify the effect of Clever 2K W PU Insulating Material on water.

Clever 2K W PU Insulating Material was contacted with water, and then the contact water was analyzed, and then the findings were compared with the threshold limit values laid down in the BS 6920 - 1, 2.6 Standard. The analysis results, and the analysis methods used are given in Table 1.

Note: the analysis parameters given without an asterisk (*) are outside the scope of the Certificate of Environmental Analyses Competence of Ministry of Environment and Urbanization so, this report cannot be used in any official dealing related to environmental legislation.

Authorized signatures: [signed] 51381, [signed] 53260

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Table 1: Contact Water Analysis Results for Clever Polimer ve Yapı Kimyasalları A.Ş., Clever 2K W PU Insulating Material Sample; Threshold Limit Values, the BS 6920 -1, 2.6 Standard

Parameter/Sample	Witness Water	Clever 2K W PU Insulating Material, the Product		BS 6920 - 1, 2.6 Threshold Limit Values
		Contact Water After 24 Hours	Contact Water After 7 Days	
(*)Aluminum (Al pg/l)	< 5	<5	< 5	200
(*)Antimony (Sb pg/l)	<0,2	< 0,2	< 0,2	5
(*)Arsenic (As pg/l)	<0,5	< 0,5	<0,5	10
(*)Boron (B pg/l)	< 20	< 20	<20	1000
(*)Cadmium (Cd pg/l)	< 0,05	< 0,05	<0,05	5
(*)Total Chromium (T. Cr pg/l)	<0,5	< 0,5	< 0,5	50
(*)Iron (Fe pg/l)	< 5	< 5	< 5	200
(*)Lead (Pb pg/l)	<0,2	< 0,2	< 0,2	10
(*)Manganese (Mn pg/l)	<0,5	< 0,5	< 0,5	50
(*)Mercury (Hg pg/l)	<0,13	< 0,13	<0,13	1
(*)Nickel (Ni pg/l)	<0,5	<0,5	0,5	20
(*)Selenium (Se pg/l)	< 1	< 1	< 1	10
(*)Color (Pt-Co unit)	0,0	0,0	0,0	5
(*)Turbidity (NTU)	< 0,41	< 0,41	<0,41	0,5
Odor	None	None	None	—
Flavor	None	None	None	—
Sediment	None	None	None	—

Table 2: Analysis Parameters and Analysis Methods

Parameter	Analysis Methods
Eluate Analysis Parameters	
(*)Aluminum, (*)Antimony, (*)Arsenic, (*)Boron, (*)Barium, (*)Cadmium, (*)Total Chromium, (*)Iron, (*)Lead, (*)Manganese, (*)Nickel, (*)Selenium, (*)Mercury	EPA 6020 A (ICP – MS)
(*)Color (Pt-Co unit)	TS EN ISO 12846
(*)Turbidity (NTU)	SM- 2120 B Visual Comparison
Odor	SM- 2130 B Nephelometric
Flavor	SM 2150 Threshold odor test
Sediment	SM 2160 Flavor Threshold Test
	Visual

SM: Standard Methods for the Examination of Water and Wastewater, 22 th Edition (2012)

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Conclusion:

The analysis of the contact waters, prepared according to the BS 6920-1, 2.6 Standard, conducted to identify the effect of Clever 2K W PU Insulating Material, a product by Clever Polimer ve Yapı Kimyasalları A.Ş., on water concluded that the values of the parameters measured were in compliance with the threshold limit values laid down in the BS 6920 -1, 2.6 Standard.

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