

WEEELABEX Organisation U Habrovky 11/247 14000 Praha 4 Czech Republic

Phone: +420 (225) 852 802 E-mail: office@weeelabex.org Web: www.weeelabex.org

Issue ID:	2017_001
Issue Category:	CFA performance test – STEP 2 Laboratory analysis
Issue Name:	Determination of water content in PU fraction from the CFA treatment process
Issue Description:	For the correct evaluation of compliance with the VFC/VHC recovery target values defined in the EN 50574-2 and CLC/TS 50574-2 for the STEP 2 CFA treatment process, it is essential to correctly determine the real content of "pure" PU matrix in the output PU fraction.
	In general, PU fractions obtained from CFA treatment processes do contain foreign matters that are not considered as PU matrix. That is why the CLC/TS 50574-2 requires to perform a specific analysis to determine the content of those foreign matters in PU fraction.
	However, based on results of a project that was run by the WEEELABEX Office, PU fractions do contain also water besides the foreign matters (the PROJECT 2017_001 was carried out in cooperation with the University of Chemistry and Technology in Prague and with the accredited laboratory ALS Czech Republic, s.r.o.).
	That is why it is essential to determine the water content in the PU fraction as well. Any specific method is not defined in the CLC/TS 50574-2 for this kind of analysis.
	How the water content shall be determined in the PU fraction within the WEEELABEX CFA performance tests?



WEEELABEX Organisation U Habrovky 11/247 14000 Praha 4 Czech Republic

Phone: +420 (225) 852 802 E-mail: office @weeelabex.org Web: www.weeelabex.org

WEEELABEX	The WEEELABEX CFA specialist auditors are required to (when carrying out
Organisation	the CFA performance test within the WEEELABEX CV process):
Statement	<ul> <li>Let determine the water content in PU fraction by an accredited laboratory using the analytical method "Thermogravimetric analysis (drying to constant weigh) - Determination of dry matter and water content on a mass basis per ISO 11465:1993" with the following specifications: <ul> <li>Drying temperature = max. 105 °C (to ensure than only water is released from the sample);</li> <li>Drying time = "to constant weigh", however at least 24 hours;</li> <li>Sample homogenisation and reduction under 0,3 mm;</li> <li>At least three test portions shall be analysed by the laboratory (due to a possible inhomogeneity of samples);</li> <li>The laboratory is requested to express the result as the average of the three sub-results;</li> <li>The laboratory is requested to specify the uncertainty of the result (in %).</li> </ul> </li> <li>Note: If an alternative method of sample preparation or analytical method is to be used (e.g. "EN 14346 Characterization of waste - Calculation of dry matter by determination of dry residue or water content"), the laboratory shall validate the alternative method in accordance with clause 5.4.5 of ISO/IEC 17025:2005.</li> <li>Take into consideration the water content in PU fraction for the calculation and evaluation of the CFA performance test results – the water content shall be deducted from the original weight of the PU fraction (in addition to other foreign matters).</li> <li>Take into consideration the uncertainty of the analysis result as per the defined WEEELABEX rules (when available).</li> </ul>
Date of Issue /	21st February 2017
Date of revision:	
Come into effect:	For each on-going and new Conformity Verification process
Status of the	Final Statement - defrev_01
Statement:	