

<b>WEEELABEX Organisation - OFFICIAL STATEMENT</b>	
Issue ID:	<b>2020_003</b>
Issue Category:	De-pollution
Issue Name:	Analysis to determine brominated flame retardants in plastics
Issue Description:	<p><b>The CLC/TS 50625-3-1 defines that compliance with the de-pollution requirements related to the brominated flame retardants in plastics can be proven by an analysis result confirming the total bromine concentration is below 2000 ppm.</b></p> <p><b>However, the REGULATION (EU) 2019/1021 defines a limit value for the restricted brominated flame retardants “polybrominated diphenyl ethers (PBDEs)” as:</b></p> <ul style="list-style-type: none"> <li>- <b>1000 mg/kg (valid until 9 June 2023);</b></li> <li>- <b>500 mg/kg (valid from 10 June 2023);</b></li> <li>- <b>350 mg/kg (valid from 30 December 2025);</b></li> <li>- <b>200 mg/kg (valid from 30 December 2027)*,</b></li> </ul> <p><b>* provided that the limit value to place this substance on the market is not higher</b></p> <p><b>What kind of analysis evidence during the WEEELABEX audits shall be required to prove compliance with the de-pollution requirements related to brominated flame retardants in plastic fractions?</b></p>
WEEELABEX Organisation Statement	<p><b>Note: the “restricted” brominated flame retardants based on the REGULATION (EU) 2019/1021 are the following polybrominated diphenyl ethers (PBDEs): tetra-, penta-, hexa-, hepta and deca BDEs</b></p> <p>One of the following possible scenarios shall be implemented to prove compliance with the de-pollution requirements related to brominated flame retardants in plastic fractions:</p> <ul style="list-style-type: none"> <li>➤ <b>SCENARIO 1) two laboratory analysis of a plastic sample (PREFERABLE SOLUTION):</b> <ul style="list-style-type: none"> <li>○ one analysis for the <b>TOTAL BROMINE</b> concentration (limit value = 2000 ppm as per the CLC/TS 50625-3-1);</li> <li>○ the second analysis for the <b>RESTRICTED PBDEs</b> (limit value as per the REGULATION (EU) 2019/1021): <ul style="list-style-type: none"> <li>▪ <b>500 mg/kg (valid from 10 June 2023);</b></li> <li>▪ <b>350 mg/kg (valid from 30 December 2025);</b></li> <li>▪ <b>200 mg/kg (valid from 30 December 2027)*,</b></li> </ul> </li> </ul> </li> <li>➤ <b>SCENARIO 2) one laboratory analysis only for the RESTRICTED PBDEs:</b> <ul style="list-style-type: none"> <li>○ if the result for RESTRICTED PBDEs is below the limit value (compliant with the REGULATION (EU) 2019/1021) than such result can be assumed to be compliant with the CLC/TS 50625-3-1 as well (as the CLC/TS 50625-3-1 is aiming to remove the restricted PBDEs where the total Bromine is an indicator).</li> </ul> </li> </ul>

	<p>➤ <b>SCENARIO 3) one laboratory analysis only for the TOTAL BROMINE:</b></p> <ul style="list-style-type: none"> <li>○ the WEEELABEX organisation does not defined any new limit value, however, as there is only limited evidence that the 2000 ppm total Bromine limit value is still suitable to confirm compliance with the up-dated REGULATION (EU) 2019/1021, the following scenario shall be applied: <ul style="list-style-type: none"> <li>▪ if the result for total Bromine is below: <ul style="list-style-type: none"> <li>▪ <b>500 ppm (from 10 June 2023);</b></li> <li>▪ <b>350 ppm (from 30 December 2025);</b></li> <li>▪ <b>200 ppm (from 30 December 2027)*,</b></li> </ul> </li> <li>▪ than such result can be assumed to be compliant with the REGULATION (EU) 2019/1021 as it can be assumed that the concentration of restricted PBDEs is below the fined limit value <b>1000/500/350/200 ppm</b> as well; however, data confirming this statement shall be continuously collected;</li> <li>▪ if the result for total Bromine is higher than <b>1000/500/350/200 ppm</b> then an additional analysis of the restricted PBDEs shall be carried out to confirm (or not) compliance with the REGULATION (EU) 2019/1021.</li> </ul> </li> </ul> <p><i>* Based on REGULATION (EU) 2019/1021, the 200 mg/kg limit value may be subject to further development.</i></p>
Date of Issue / Date of revision:	<b>10<sup>th</sup> June 2020 / 22<sup>th</sup> September 2023 (defrev_03)</b>
Come into effect:	<b>For each General and Surveillance audit</b>
Status of the Statement:	<b>Final Statement - defrev_03</b>