

Life Cycle Impact Reduction Action Plan Report 4-Pair Copper Plenum Cable 101.1

Impact information and Reduction Summary

Manufacturer:	Superior Essex Communications
Manufacturer Contact Information:	Annie Bevan, Global Head of Sustainability, annie.bevan@spsx.com
Product Names:	10Gain® XP Category 6A, 10Gain® Category 6A, Category 6A STP (U/FTP), Category 6A ScTP (F/UTP), Category 6+ ScTP (F/UTP), Next-Gain® Category 6eX, DataGain® Category 6+, Category 6 with FEP Jacket, Category 6, Cobra Category 5e+, Category 5e+ ScTP (F/UTP), Marathon LAN® Category 5e, PowerWise™ Category 5e+ 4PPoE
Product Type:	Commercial Building Product-Communication Cable
Location where the product was manufactured:	Hoisington, KS
Title of the Life Cycle Assessment/Environmental Product Declaration that the assessment is based upon:	Superior Essex 4789047039.101.1 4-Pair Copper Plenum Cable
Life Cycle Assessment/Environmental Product Declaration Type:	Product specific Type III EPD
Link to publicly available LCA or EPD:	https://sustainability.superioressexcommunications.com/wp-content/uploads/2019/10/EPD-Plenum-Rated.pdf
LCA Framework/PCR:	References PCR for Electrical, Electronic and HVAC-R Products (2015) and PSR for Wires, Cables and Accessories (2015)
Date of LCA or EPD:	October 1, 2019
Scope:	Cradle to grave per PCR referenced above.
Describe how the scope of the product LCA or EPD aligns with actions identified in this Action Plan:	The actions listed in this plan were based on analysis of the raw material and manufacturing stages of the LCA data.

LCA Software, Version, and Dataset:	The LCA model was created using the GaBi 9 Software system for life cycle engineering, developed by thinkstep AG. The GaBi 2019 LCI database (Service Pack 38) provides the life cycle inventory data for several of the raw and process materials obtained from the background system.																																																																																		
Action Plan Creation Date:	November 1, 2020																																																																																		
Action Plan Expiration Date:	November 1, 2024																																																																																		
Is this Action Plan applicable to all products listed in the analysis (must include GWP)?	The Action Plan is applicable to all products listed in the corresponding EPD.																																																																																		
Table or Summary of Largest Life Cycle Impacts identified in the analysis (must include GWP):	<p>The highest impact area was found to be manufacturing, which includes raw material extraction. Of all impact areas, Global Warming Potential was consistently the highest. The following table is provided as an example:</p> <table border="1"> <thead> <tr> <th rowspan="2">IMPACT CATEGORY</th> <th rowspan="2">UNIT</th> <th colspan="5">10Gain Category 6A</th> </tr> <tr> <th>Manufacturing</th> <th>Distribution</th> <th>Installation</th> <th>Use</th> <th>EOL</th> </tr> </thead> <tbody> <tr> <td>GWP</td> <td>kg CO₂-eq.</td> <td>0.419</td> <td>0.0149</td> <td>0.0402</td> <td>0.147</td> <td>0.015</td> </tr> <tr> <td>AP</td> <td>kg SO₂-eq.</td> <td>1.54E-03</td> <td>3.58E-05</td> <td>1.20E-04</td> <td>4.39E-04</td> <td>4.17E-05</td> </tr> <tr> <td>EP</td> <td>kg PO₄³⁻-eq.</td> <td>1.28E-04</td> <td>1.02E-05</td> <td>1.53E-05</td> <td>2.39E-05</td> <td>6.38E-06</td> </tr> <tr> <td>ODP</td> <td>kg R11-eq.</td> <td>1.11E-11</td> <td>1.49E-18</td> <td>5.85E-13</td> <td>4.82E-16</td> <td>1.15E-16</td> </tr> <tr> <td>POCP</td> <td>kg C₂H₄-eq.</td> <td>1.09E-04</td> <td>-1.06E-05</td> <td>8.90E-06</td> <td>2.66E-05</td> <td>-2.08E-06</td> </tr> <tr> <td>ADPe</td> <td>kg Sb-eq.</td> <td>4.43E-04</td> <td>3.01E-09</td> <td>2.33E-05</td> <td>3.50E-08</td> <td>3.57E-09</td> </tr> <tr> <td>PED</td> <td>MJ</td> <td>8.67</td> <td>0.224</td> <td>0.555</td> <td>2.348</td> <td>0.234</td> </tr> <tr> <td>Net Water Use</td> <td>m³</td> <td>0.003</td> <td>2.68E-05</td> <td>1.71E-04</td> <td>8.22E-04</td> <td>1.19E-04</td> </tr> <tr> <td>Air Pollution</td> <td>m³</td> <td>11100</td> <td>0.70</td> <td>4.08</td> <td>7.29</td> <td>0.96</td> </tr> <tr> <td>Water Pollution</td> <td>m³</td> <td>34.26</td> <td>0.01</td> <td>0.00</td> <td>0.04</td> <td>0.01</td> </tr> </tbody> </table>	IMPACT CATEGORY	UNIT	10Gain Category 6A					Manufacturing	Distribution	Installation	Use	EOL	GWP	kg CO ₂ -eq.	0.419	0.0149	0.0402	0.147	0.015	AP	kg SO ₂ -eq.	1.54E-03	3.58E-05	1.20E-04	4.39E-04	4.17E-05	EP	kg PO ₄ ³⁻ -eq.	1.28E-04	1.02E-05	1.53E-05	2.39E-05	6.38E-06	ODP	kg R11-eq.	1.11E-11	1.49E-18	5.85E-13	4.82E-16	1.15E-16	POCP	kg C ₂ H ₄ -eq.	1.09E-04	-1.06E-05	8.90E-06	2.66E-05	-2.08E-06	ADPe	kg Sb-eq.	4.43E-04	3.01E-09	2.33E-05	3.50E-08	3.57E-09	PED	MJ	8.67	0.224	0.555	2.348	0.234	Net Water Use	m ³	0.003	2.68E-05	1.71E-04	8.22E-04	1.19E-04	Air Pollution	m ³	11100	0.70	4.08	7.29	0.96	Water Pollution	m ³	34.26	0.01	0.00	0.04	0.01
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<p>Narrative Description of the Impact Areas Targeted for Reduction (must include specific steps, dates, and timeline for completion, and include why/why not GWP is targeted for reduction and include a numeric impact reduction target. Actions must correspond to impact modules analyzed in the LCA or EPD):</p>	<p>All of the following impact reduction measures correspond with the Global Warming Potential in manufacturing impact, Superior Essex plans to implement these practices within the coming 3 years to reduce our total life cycle impact.</p>
<p>Specific Steps:</p>	<p>Estimated Time to Complete:</p>
<p>LED Lighting retrofit</p>	<p>End of Q2 2022</p>
<p>HVAC efficiency adjustments</p>	<p>End of Q4 2020</p>
<p>Process water temperature isolation</p>	<p>End of Q3 2021</p>
<p>Air wipe and filler line efficiency adjustments</p>	<p>End of Q2 2021</p>
<p>Low-flow fixture installation</p>	<p>End of Q2 2021</p>
<p>This Action Plan was prepared by:</p>	<p>Annie Bevan, Global Head of Sustainability x <u><i>Annie Bevan</i></u></p>
<p>This Action Plan was confirmed by an executive of the manufacturer:</p>	<p>Brian Ensign, Vice President of Marketing x <u><i>Brian Ensign</i></u></p>