

UPDATE **MASL-2/2**

Aerobic biodegradation test under controlled composting conditions $(28^{\circ}C)$

Author: Olive Nkundwakazi Date: March 6, 2024

Dear Lucia Kurcz,

Please find herewith a new update of the aerobic biodegradation test under controlled composting conditions at ambient temperature (28°C) MASL-2/2 on test item Nonoilen X3000-2 with results up to 180 days. Test material Nonoilen X3000-1 was stopped after 120 days.

Table 1 shows the TOC (total organic carbon content), net CO_2 production and the biodegradation percentage of reference and test items. An overview of the evolution of the biodegradation percentage of the different materials is given in Figure 1, while Figure 2 and Figure 3 show the biodegradation of the replicates of reference and test item.

After 180 days reference item cellulose has reached a biodegradation percentage of 94.5%. The biodegradation of test item Nonoilen X3000-2 proceeded further and, until now, an absolute biodegradation of 94.5% has been measured. On a relative basis, compared to suitable reference item cellulose, a biodegradation of 100.0% has been calculated. As such the 90% biodegradation requirement has been reached and the test can be stopped.

Normec OWS nv

Pantserschipstraat 163

9000 Gent, Belgium

+32 9 274 95 05

info-ows@normecgroup.com

March 6, 2024 F_211_Rev03

www.normecows.com

Please let us know as soon as possible if you agree to stop the test.

Best regards,

Olive Nkundwakazi

Study Director, Normec OWS nv

Tabla 1	$T \cap \cap$	not CO	nraduation	and hindow	adation	aftar 10	1 days
тарет.			DIOOUGIION	ano biodeora	10111011 8	11101 10	U Davs
	,		10.000.000.000				

Test series	тос	Net CO ₂ production	Biodegradation (%)		
	(%)	(mg/g test item)	AVG	SD	REL
Cellulose	42.4	1469	94.5	0.5	100.0
Nonoilen X3000-2	55.8	1933	94.5	1.0	100.0

With AVG = average, SD = standard deviation, REL = relative biodegradation



Figure 1. Evolution of the average biodegradation percentages of reference and test items





Figure 2. Evolution of biodegradation of replicates of cellulose



Figure 3. Evolution of biodegradation of replicates of Nonoilen X3000-2

