



Eden Research Laboratory

To: Biosphere

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Regarding: ASTM D5511 Biosphere Study update (1571 days)

Update

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	Inoculum	Negative	Positive	APEX PE STRETCH FILM CONTROL	APEX PE STRETCH FILM W/ BIOS-PHERE
Cumulative Gas Volume (mL)	3254.5	2830.4	11662.4	3023.2	32500.7
Percent CH ₄ (%)	48.5	47.5	41.6	41.9	54.2
Volume CH ₄ (mL)	1578.9	1345.2	4849.5	1266.2	17610.3
Mass CH ₄ (g)	1.13	0.96	3.46	0.90	12.58
Percent CO ₂ (%)	37.5	37.6	42.1	37.8	34.6
Volume CO ₂ (mL)	1221.2	1063.3	4909.5	1141.4	11245.0
Mass CO ₂ (g)	2.40	2.09	9.64	2.24	22.09
Sample Mass (g)	10	10	10	20.0	20.0
Theoretical Sample Mass (g)	0.0	8.6	4.2	17.1	17.1
Biodegraded Mass (g)	1.50	1.29	5.23	1.29	15.46
Percent Biodegraded (%)		-2.4	88.3	-1.2	81.4
* Adjusted Percent Biodegraded (%)		-2.8	100.0	-1.4	92.2

* The adjusted % biodegraded values are for informational purposes. It is not part of the method and will not be reported in the final report.

Biodegradation

