

## PRODUCT DATA SHEET Enviro-Cel Stimulose™

Anaerobic Digestion Additive

SixRing<sup>TM</sup> Enviro-Cel Stimulose<sup>TM</sup> is a cellulosic product made from non-food based sustainable lignocellulosic biomass using a proprietary process. This product is a high-performance, plant-based additive for anaerobic digestion designed to enhance methane generation and decrease hydrogen sulfide ( $H_2S$ ) production.

The ultra-high purity and advanced properties of Enviro-Cel Stimulose™ allows for a healthier microbial community that is driven towards methanogenesis, ensuring optimal performance of any anaerobic digester.

#### FEATURES & BENEFITS

- High purity product
- ✓ No metal content
- ✓ Increases biogas and methane generation
- ✓ Increases Volatile Solids (VS) conversion
- ✓ Lowers H₂S evolution
- Easily suspends in water
- ✓ 100 % Plant-based, non-synthetic
- ✓ Highly biodegradable
- Renewable

### PHYSICAL PROPERTIES

Appearance:	Wet solid
Colour:	White to off-white
Solid content (% wt.):	50 % or as per request
Lignin content (% wt.):	< 1 %
Solubility:	Insoluble in water
Bulk density (cm <sup>3</sup> /g):	2.0 - 2.3
pH (1 % slurry):	6 - 7





Figure 1. SixRing™ Enviro-Cel Stimulose™ is a sustainable high-performance anaerobic digestion additive.



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### REPORT OF ANALYSIS

Studies conducted by a third-party revealed that supplementation of Enviro-Cel Stimulose<sup>M</sup> into anaerobic digestion can double methane production\* (Figure 2a), as a result of an increased conversion of volatile solids to methane (Figure 2b). Additional changes observed include a 54 % reduction of  $H_2S$  production and an increase of 9.8 % in methane concentration when Stimulose<sup>M</sup> is added at a loading of 6.7 % wet wt./wt. (2.3 % dry wt./wet wt.).

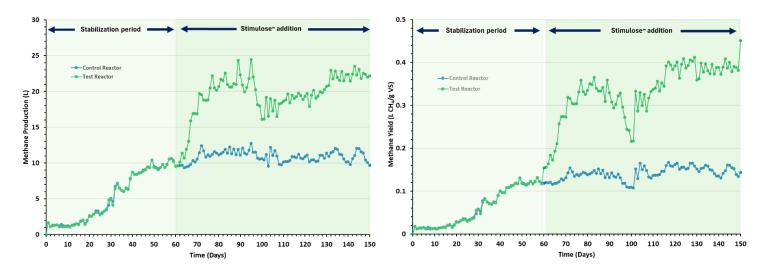


Figure 2. a) Increase in methane generation observed after the addition of SixRing™ Enviro-Cel Stimulose™ in a digester at a 2.3 % dry wt./wet wt. loading, b) corresponding methane yield increase.

(\*) Dependent on loading.

### SAFETY, STORAGE & HANDLING

- Store in original, tightly closed containers in a cool, well-ventilated area.
- ✓ Non-Regulated for transportation and storage.
- ✓ Use appropriate personal protective equipment (PPE) when handling.
- Refer to the Safety Data Sheet (SDS) for detailed information on safety, storage & handling.

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