

Testing Protocols for SorbaSolv™ Biodegradation

Oily water (10% by weight K-1 kerosene) was the primary substrate. Three tests were run using 100 ml of oily water in bottles A & B; a third bottle contained 100 ml water. Bottles B&C contained 2.38 grams SorbaSolv™. All three bottles contained 5 ml solution of nitrogen, phosphorus and other micronutrients. All three bottles were inoculated with one million Munox 712 cells (Osprey Biotechnics) per ml.

The respirometer data reveal that the oil/ SorbaSolv™ mixture is recognized as a substrate at a much earlier time than oil alone. The data also reveal a higher oxygen consumption by the oil/ SorbaSolv™ mixture showing that the SorbaSolv™ is biodegraded along with the oil. The third bottle(C) with SorbaSolv™ alone showed oxygen consumption at a rate that shows SorbaSolv™ alone is biodegradable.

Combined with the fact that SorbaSolv™ agglomerates oil and prevents its dispersion in water, the above data indicates that SorbaSolv™ will not only accelerate biodegradation but will also immobilize the organic allowing full biodegradation without loss of biomass both in floating spills and organics in soil.