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# An innovative dispersant with very low toxicity and bio-accumulation, the experiment at the Ayia Napa fishing shelter in Cyprus

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The application of chemical dispersants can be an effective mean for oil spill response strategy.
The dispersion of oil by chemical dispersants accelerates evaporation and disperse the oil into the water column, where it is broken down by natural processes resulting to the reduction of environmental and economic impacts of the spilled oil, especially at near coastal resources.
However, as with other response techniques, dispersants have also their limitations and account must be taken of the characteristics of the oil being treated (efficiency), water and weather conditions and environmental sensitivities (toxicity and bioaccumulation).
The MSL dispersant is an innovative new and its composition is mainly based on natural constituents. MSL dispersant has a number of advantages compared to other dispersants:
-Efficiency is more than 80% when using the Arabian crude oil.
-Toxicity is in the range of 200 -600ppm, depending on the species used for testing.
-Very high biodegradation rate.
Due to the above characteristics MSL dispersant can be used also for the cleaning and to maintain the good environmental condition of harbor, ports, rivers, canals contaminated from Petroleum Hydrocarbons. The MSL dispersant has been tested during a period of 2 months in the fishing shelter of Ayia Napa in Cyprus with excellent results. Water samples taken in the fishing shelter before the experiment shown high concentration for 6 chemical parameters (BOD5, COD, FOG, TKN, TP, TPH), while after the use of the and MSL dispersant their concentration was reduced drastically, for some of the parameters down to the limits of the chemical analysis. The experiment was repeated every 2 weeks for a period of 2 weeks.