

NOAA's Oil Spill Response

Surface Washing Agents

Surface washing agents are liquid products designed to make it easier to remove oil from surfaces and structures that have been oiled so that they don't become "secondary sources" of pollution.

Thirty-three surface washing agents are currently listed on the National Contingency Plan Product Schedule, an EPA list of products that have met basic requirements for being considered for use in an oil spill response. Approval from the Regional Response Team is needed before a surface washing agent can be used in a manner that would cause it to be released to the environment.

When Surface Washing Agents are Used

Surface washing agents are used to soften and lift oil off of surfaces or structures that have been oiled, such as beach rocks, rock platforms, artificial structures, and riprap. Typically, conventional cleanup methods are used first to the extent of their utility (e.g., removal of gross oiling).



Surface washing agents also are used to clean and decontaminate response equipment and, less often, vessels that have been oiled. For example, in 2001, the M/V *Genmar Hector* (left) was cleaned with surface washing

agents after its hull and superstructure were oiled.

Surface washing agents typically act relatively quickly and can be used on all types of oil. The application methods vary but the agents are typically sprayed on

the oiled surface, allowed to soak 5 to 15 minutes, followed by a warm water/high pressure wash.

How They Work

Surface washing agents contain surfactants, solvents, and/or other additives that soften and lift oil off the surface. There are two main types. "Lift and float" products lift oil from the surface so it floats on the water as a slick and can be recovered. Booms, sorbents, and vacuum pumps are often used with these products to collect and recover the oil. "Lift and disperse" products act like detergents to lift oil off surfaces, emulsify it (break it into fine droplets), and disperse it into the water.

Because it's not possible to recover the oil directly when using this type of product, responders must contain and recover the washwater.

Example Surface Washing Agents

Corexit 9580 and PES-51 are both "lift and float" surface washing agents. PES-51 is composed mainly of surfactants and d-limonene, a chemical with a lemon-like odor produced naturally by citrus plants and some coniferous trees. PES-51 has been used or tested at many oil spills. A good summary of surface washing agents can be found at

[http://www.nrt.org/Production/NRT/RRTHome.nsf/resources/RRT%20IV%20Meeting%20Summaries/\\$file/SurfaceWashingAgents.pdf](http://www.nrt.org/Production/NRT/RRTHome.nsf/resources/RRT%20IV%20Meeting%20Summaries/$file/SurfaceWashingAgents.pdf).

Learn more about NOAA's response to the BP oil spill at <http://response.restoration.noaa.gov/deepwaterhorizon>.

To learn more about NOAA, visit <http://www.noaa.gov>. 

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