Dispersant Corexit EC9500A

Corexit EC9500A, produced by Nalco Environmental Solutions LLC, is a widely used dispersant that aids in the natural dispersion of oil in marine environments. This dispersant has been evaluated for effectiveness, toxicity, and biodegradability to meet stringent regulatory standards, making it suitable for oil spill response operations worldwide. It is designed for quick, efficient application in varied conditions, helping to mitigate environmental impact by breaking down oil into smaller droplets for natural biodegradation.



Key Facts

- Demonstrates effective oil dispersion across a wide range of temperatures, functioning well even in cold water (down to 0°C)
- Approved for use in key oil-spill response regions, including the United States, United Kingdom, and France
- Meets the International Convention on Oil Pollution Preparedness, Response, and Cooperation (OPRC) standards, underscoring its global applicability
- Exceeds minimum efficiency requirements in laboratory tests, achieving rates over 60% in most cases
- Contains no persistent toxic constituents, minimising long-term environmental impact



Approvals	
USA	Approved by the Environmental Protection Agency (EPA) under the National Contingency Plan (NCP) Product Schedule. This approval requires a minimum effectiveness of 45%, which Corexit EC9500A exceeds.
UK	Meets the LR448 standard, which mandates a minimum dispersant efficiency of 60%. Corexit EC9500A passed these tests, confirming its suitability for oil spill response in UK waters.
France	Approved according to the Institut Français du Pétrole (IFP) standards, which also require a minimum efficacy of 60%. Corexit EC9500A meets and exceeds these effectiveness requirements.





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Members can access the Global Dispersant Stockpile and the UK Dispersant Stockpile through additional supplementary agreements.



Toxicity

Corexit EC9500A has undergone extensive toxicity testing to ensure its relative safety when used as directed:

- Marine organism testing: Slightly toxic to mysid shrimp (Americamysis bahia) and practically non-toxic to inland silverside fish (Menidia beryllina), with tests showing that the dispersant is significantly less toxic than the oil itself when dispersed.
- Compliance with French toxicity standards: The dispersant's toxicity is at least ten times lower than the reference toxicant Noramium DA50, which is a benchmark for regulatory compliance in France.
- Comparative toxicity: Studies show that Corexit EC9500A, when mixed with oil, is no more toxic than oil alone, allowing for its use in situations where reducing surface oil and environmental impact is a priority.

Effectiveness

Corexit EC9500A is highly effective in dispersing oil, based on rigorous laboratory tests:

- Swirling flask test: Demonstrates an approximate 72% effectiveness under low-temperature conditions, providing reliable performance even in colder climates.
- International standards compliance: Passes various international tests, such as the UK LR448, French IFP, and the US EPA's effectiveness evaluations, achieving results well above minimum thresholds
- Rapid dispersion capability: Designed for immediate application and quick dispersion in open water, which enhances the natural breakdown of oil in marine environments, reducing the likelihood of oil reaching shorelines or sensitive areas.

Biodegradability

- High biodegradability: Corexit EC9500A meets biodegradability standards in France, requiring at least 50% breakdown, which supports the rapid degradation of dispersed oil.
- Environmentally compatible: Formulated without persistent toxic compounds, Corexit EC9500A aids in the environmental recovery process post-application. It supports natural biodegradation by breaking oil into smaller droplets that can be more easily degraded by natural microbial processes.
- No long-term environmental impact: With no persistent constituents,
 Corexit EC9500A ensures minimal environmental residue, promoting quicker recovery of affected areas.

