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OIL DISPERSANTS IN THE MARINE ENVIRONMENT: APPLICATION AND IMPLICATIONS FOR ENVIRONMENTAL SUSTAINABILITY

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Abstract

Oil spills in open waters are a major threat to the marine environment and its surroundings. Dispersants have been widely used in many countries as one of the response strategies, breaking the oil slick into smaller droplets so that biodegradation can take place within the water column. Modern formulation of dispersants are aimed at reducing even more significantly the size of the spill while enhancing quite rapidly a high rate of biodegradation. This review summarizes types of dispersants, mechanisms involved in them, and resultant sustainable biodegradation together with current problems confronting future research gaps highlighted herein.

Key words: application, biodegradation, sustainability, dispersant oil, mechanism

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