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Construction of oil-unidirectional membrane for integrated oil collection with

lossless transportation and oil-in-water emulsion purification

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Abstract

Oily wastewater and oil spills not only cause large amounts of resource wastefulness, but

threaten water safety and human health. Besides, for some oily emulsions, the oil droplets

are usually valuable, such as the soybean oil droplets formed during oil manufacture, and

the oil droplets carrying high valued product from the extraction process or micro-

emulsion reactor. Therefore, the collection and recovery of oil from water are particularly

1

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