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GI-WACAF Dispersants

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Introduction

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OSRL Dispersant Core Group:

Core Groups are centres of excellence within OSRL
which exist to enhance organisation-wide discipline capability in key technical areas, One of those being dispersants.
Discipline capability includes personnel competence, equipment and technology, operating procedures, training programmes, institutional knowledge; and mechanisms for drawing on external expertise.

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Dispersant Video

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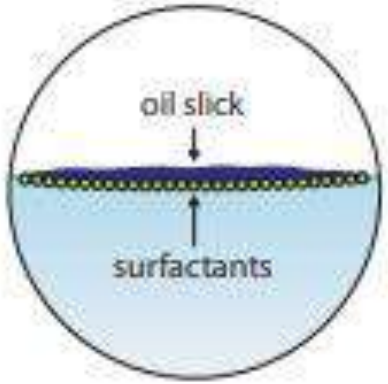
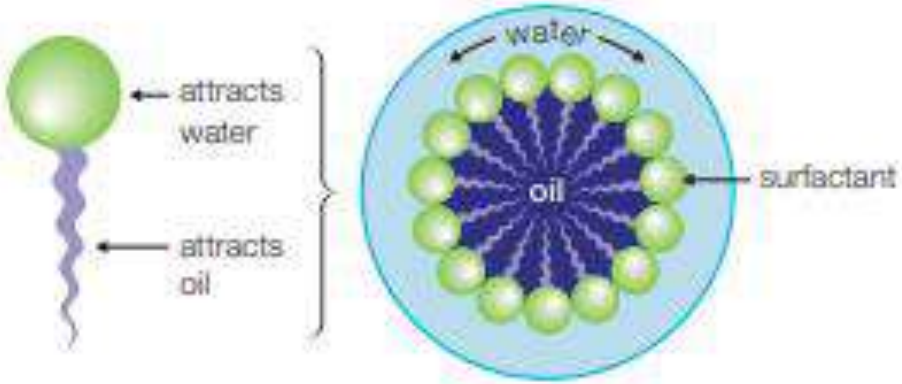
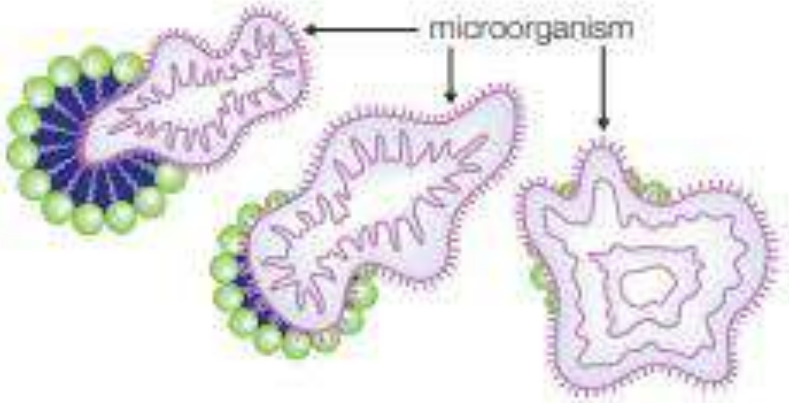
How dispersants work



Surfactants reduce the interfacial tension between oil and water so that oil slicks can break apart.



Surfactants are comprised of two parts; the molecules attract water on one end, and oil on the other.



Microorganisms convert oil into mostly carbon dioxide (CO_2) and water (H_2O).

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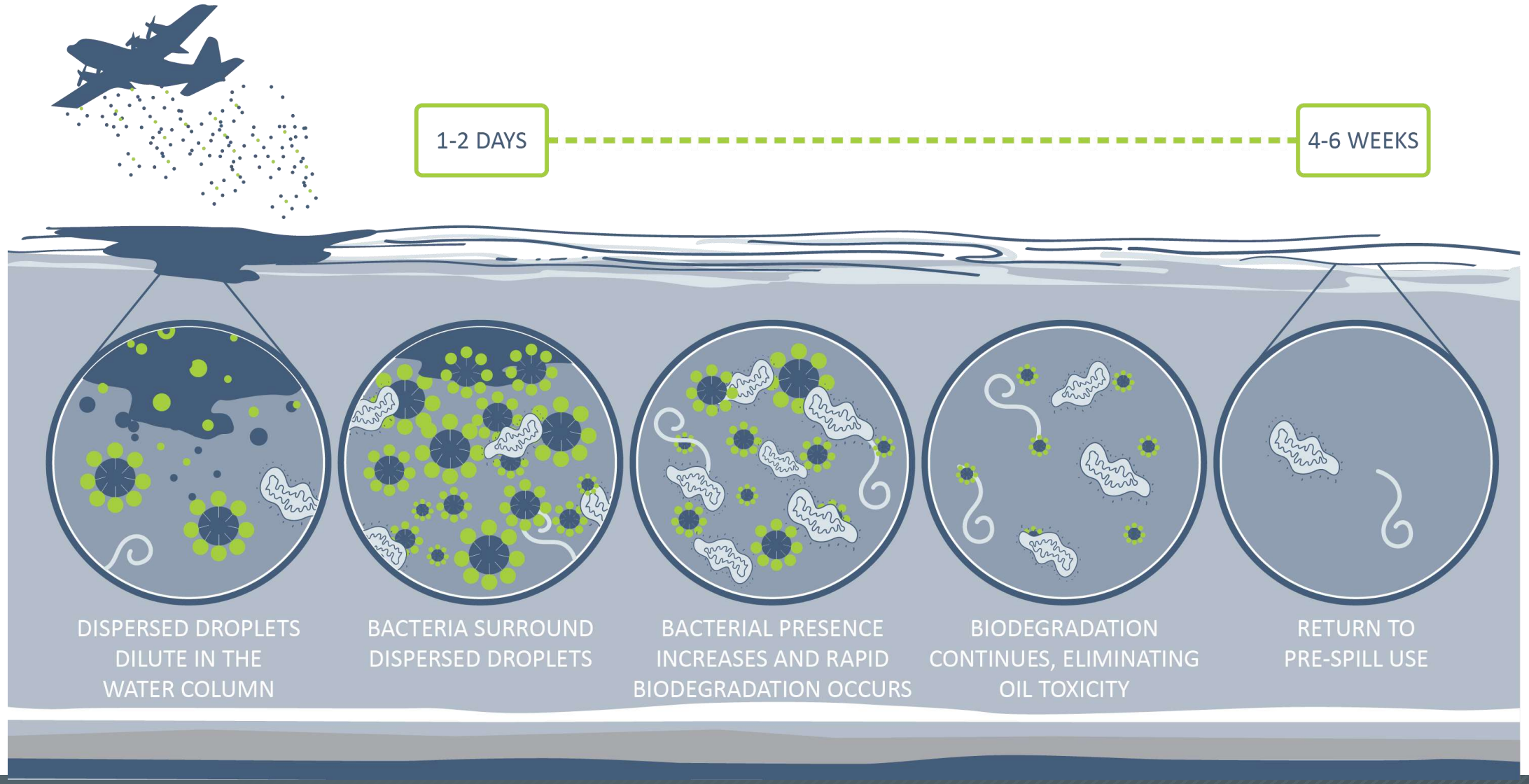
How do Dispersant's work?



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APPLICATION TECHNIQUES

Dispersant Application

- Aerial
- Vessel
- Subsea

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Spray Arms

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Aerial Application

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Dispersant Effectiveness Test (Shaky Bottle Test)

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Dispersant Effectiveness Test (Shaky Bottle Test)

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Dispersant Effectiveness

- **Visual Monitoring:**

No change

Coffee Colour

Milky White

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Application Considerations

- Surveillance
  - Finding the slick and targeting application
  - Thickest part = leading edge of slick
- Training and safe usage
- Quantity needed and storage
  - Adequate stocks and access to re-supply
  - Undefined “shelf-life” for sealed dispersant
  - Containers can deteriorate: test periodically

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Quiz

- 1. What part of the water column do surface dispersants work in?
  - A. Top 100 meters
  - B. Top 5 to 10 meters
  - C. All the way to the sea floor

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Quiz

- 2. What visual indication do we have if the dispersant is working?
  - A. A white plume will appear in the water
  - B. Oil turns a coffee colour and forms a plume below the surface
  - C. Oil will sink to the sea bed

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