

# HOW DOES SEA FOAM FORM?

Like filling up a bubble bath or steaming a latte, sea foam forms when certain molecules in the water are mixed until they're frothy. In the ocean, DECAYING MARINE LIFE releases organic molecules, including proteins and fats, into the water. Some proteins and fats can act as SURFACTANTS. Surfactants have a hydrophilic or "water-loving" end that is attracted to water



and a hydrophobic or "water-fearing" end that is repelled by water. This dual nature means that these molecules end up collecting on surfaces – the surface of the water, an air bubble, a particle of dirt, or a droplet of oil, for example. Surfactants form spheres called MICELLES with their hydrophilic ends in the water and their hydrophobic ends pointing toward the surface. In the case of sea foam, wind and waves mix the water, and surfactants form micelles around air bubbles, stabilizing them so the bubbles don't pop right away. This is how sea foam forms.

