

# ECHOWET<sup>®</sup> wetting agent & de-airing agent



Echowet immersion additive is a specifically formulated liquid nonionic surfactant designed to reduce surface tension and improve wetting in immersion tanks and automated equipment that uses water as a coupling medium.

## Temperature Operating Range

32° to 113°F (0° to 45°C)

## Benefits

- Reduces surface tension and eliminates air trapped in immersion baths
- Reduces the need to heat immersion baths or allow bath to de-air
- Lowers interfacial tension between oil and water, improving the degree of wetting of oily parts and reducing the incidence of small air bubbles clinging to the part when immersed
- Provides better coupling during automated scanning
- Compatible with Echonox I and Echonox II
- Not degraded by exposure to UV light used for water sterilization

## Safety and Environment

- Echowet can cause skin sensitization over time. Rubber gloves are recommended for handling undiluted material.
- Concentrate is an extreme eye irritant - wear safety goggles
- In-use concentrations are not considered harmful.

## Chemical Analysis and Certification

Independent laboratory analysis of Chlorine and Sulfur by batch number referencing ASTM procedures is available upon request for an additional charge.

## Properties (1.0% solution in deionized water)

pH.....6.0<sup>±</sup>1.0  
Cloud point of Echowet in water .....96°F (35°C)

## Wetting Agents

As tanks are refilled or parts are submerged into water for inspection, air bubbles form in the tank and on immersed parts. Air bubbles interfere with sound waves and degrade ultrasound transmission. Optimal transmission requires no air bubbles that can reflect, scatter or attenuate sound waves. Wetting agents, like Echowet, lower the surface tension of the water and release tiny air bubbles that cling to parts. Echowet also reduces the interfacial tension between dirt/oil and water. Oil and dirt on parts can trap and attract air bubbles. As the parts are submerged, Echowet helps strip away the air trapped by oil and dirt.

## Recommended Echowet Addition

*Usual application (0.125% or 1,250 ppm by volume)*

4 fl. oz. (118 ml) per 25 gal (95L)  
Echowet immersion water

16 fl. oz. (473 ml) per 100 gal (379L)  
Echowet immersion water

*For oily parts (0.25% or 2,500 ppm by volume)*

8 fl. oz. (237 ml) per 25 gal (95L)  
Echowet immersion water

32 fl. oz. (946 ml) per 100 gal (379L)  
liters) Echowet immersion water

## Packaging

1-gallon (4 liter) container  
5-gallon (18.9 liter) container  
15-gallon (56.8 liter) drum  
55-gallon (208.2 liter) drum

**NOTE:** Echowet should be stored between 70°F and 100°F. If the temperature falls below 60°F, the material becomes thick and cloudy. Below 50°F it becomes solid. Warming the material to 80°F may be required before using. Avoid exposure to high temperatures. Freezing does not affect the performance of the product if warmed before using.



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