



# BAROID PENETROL®

Wetting Agent

**Description** PENETROL wetting agent is a water miscible, non-ionic surfactant designed to counteract the sticking tendencies of clay.

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**Applications/Functions**

***The use of PENETROL wetting agent aids the following:***

- Reduce or eliminate bit balling
  - Reduce surface tension of drilling fluid, which allows faster chip removal without continuously grinding the hard shale formations
  - Improve drilling efficiency by preferentially coating the bottom-hole assembly and drill string
  - Minimize differential sticking
  - Increase bit life and reduce drill pipe and bottom-hole assembly wear
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**Advantages**

- Easy to mix
  - Effective in low concentrations
  - Compatible with other Baroid drilling fluid additives
  - Biodegradable
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**Typical Properties**

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|----------------------------|---------------------|
| • Appearance               | forest green liquid |
| • Specific gravity         | 0.98                |
| • pH (1%) solution         | 9.5                 |
| • Flash point, TOC, °F, °C | >300, (149)         |
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**Recommended Treatment**

***Added uniformly through entire circulation system***

- 1 to 4 quarts of PENETROL wetting agent per 100 gallons of drilling fluid
- 2.5 to 10 liters of PENETROL wetting agent per m<sup>3</sup> of drilling fluid

***As a slug down drill rods to counteract the sticking tendencies of clay***

- 1 to 2 quarts of PENETROL wetting agent per drill rod
- 1 to 2 liters of PENETROL wetting agent per drill rod

***Alternate application***

- Dilute 1 gallon of PENETROL wetting agent with 10 gallons of water and inject one gallon of mixture per minute into the pump suction
  - Dilute 3.8 liters of PENETROL wetting agent with 38 liters of water and inject 3.8 liters of mixture per minute into the pump suction
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