



• T E C H N I C A L D A T A

BEN-BAC™

ASPHALTENE CONTROL FOR SELECT CRUDE OILS

General Description

BEN-BAC™ is a proprietary combination of natural, facultative anaerobic bacteria used to control select asphaltenes, enhance flow properties of selected asphaltic oils, and prevent paraffin deposition. **Ben-Bac** can act to break apart organic deposits in the perforations, pumps, and tubing. Due to the diversity of structural types of asphaltenes and the complexity of asphaltene interactions with other crude oil components, testing is suggested before treatment is initiated.

Ben-Bac's selected microorganisms function in severe downhole conditions, such as high temperatures, and in contact or immersion in generally toxic substances.

Ben-Bac is normally used in conjunction with other Para-Bac™ products to enhance the control of combined asphaltene-paraffin deposition.

Product Specifications

Color	Light pink to tan
pH	6.5-8
Weight per gallon	8.51 lbs.
Specific gravity	1.02
Freeze point	32° F
Viscosity	1.30 cps - 60° F
Odor	Mild organic

Application

BEN-BAC™ comes as a ready-to-use liquid formulation and it can be introduced to the well through the wellbore annulus by pumping or by a permanently installed pressure vessel. Treatment begins with an inoculation to establish the bacterial population of the well system. Thereafter, at predetermined intervals, maintenance doses of **Ben-Bac** can be added to maintain the colony of bacteria.

Handling and Safety

*BEN-BAC meets EPA requirements for release into the environment. Special clothing or equipment is not required for handling BEN-BAC. Routine sanitary hygiene practices should be observed.**

*MSDS Available upon request.