

PentaFlow

PentaFlow is a unique multipurpose water and surfactant based product that provides several benefits.

- Dissolves Calcium Carbonate (CaCO₃)
- Dissolves wax, sludge, asphaltenes and other hydrocarbon residues
- Breaks up emulsions
- Dehydrates clays
- Leaves surfaces waterwet

With these benefits it is used subsurface to solve many of the problems that are common to old and new wells.

PentaFlow is also an excellent oil free drilling fluid pipe release additive which works by dissolving calcium carbonates and polymers with an aggressive action whilst drying and cracking clays. It is used in OBM or WBM stuck pipe applications. **PentaFlow** contains a surfactant for removing glycol and oily inhibitors in water based or oil based fluid filter cakes. It can be used to dissolve cement sheaths left in casing as well as collapsed carbonate formations. It is used neat and is nominally pumped behind a weighted pill in weighted muds. **PentaFlow** has excellent bit and BHA de-balling and cleaning characteristics, but can also be used to clean casing behind OBM displacements when switching over from OBM to WBM as it removes oil film and water wets metal.

PentaFlow is also used in some stimulation applications to etch the filter-cake, pinhole it, and with the volatile water miscible solvent carried, strip away any hydrocarbons and reduce any micro-emulsions present. This allows other products that are used to work faster and more completely. It also dissolves CaCO₃ and other calcium compounds further aiding enhanced production.

PentaFlow is also used in descaling operations. It is ideally suited for many descaling applications as it will dissolve CaCO₃, asphaltenes, sludge, and wax in the matrix, whilst dehydrating and breaking up any accumulated clay and shale in the scale matrix. **PentaFlow** also has the added advantage of being non-corrosive.

PentaFlow was rated “E” in the old UK OCNS environmental rating system.

PentaFlow is packaged in 200 ltr drums, four to a pallet.

TYPICAL PROPERTIES

Chemical Name	Mixture Potassium neutralized Acid & Surfactants
Appearance	<i>Clear Liquid</i>
Flash Point, (°C)	<i>Not Applicable</i>
Specific Gravity	<i>1.145</i>
Solubility in Water	<i>Soluble</i>
pH	<i>1.4 - 2.3</i>

SHIPPING INFORMATION

D.O.T	<i>Not Regulated</i>
D.O.T. Proper Shipping Name	<i>Not Regulated</i>
I.D. Number	<i>Not Applicable</i>
Reportable Quantity	<i>Not Applicable</i>
Freight Classification	<i>Not Classified</i>
Special Transportation Notes	<i>None</i>

REGULATORY INFORMATION

TSCA	<i>All components registered</i>
Sara Title III (Section 313)	<i>No components subject to reporting</i>

HANDLING INFORMATION

PentaFlow is supplied in 200 litre plastic drums (237 kg/drum) and tote tanks if requested. Read and understand the Material Safety Data Sheet (MSDS) prior to using this product.