



## PMI-107and PMI-107FA

**PMI-107** is designed to be a highly effective wax and corrosion inhibitor. Its variant, **PMI-107FA** has a very effective non-toxic additive which completely neutralises H<sub>2</sub>S at source.

**PMI-107** is an amphiphilic compound formed of nano-particles. Consequently, it has a molecular structure with a partly negative polarity. This is an important and fundamental characteristic which drives the performance of **PMI-107** in successfully enhancing the flow of crude oil in transportation pipelines and systems. The negatively charged polar "head" of each **PMI-107** molecule is, by its nature, inevitably and strongly attracted to other polar materials. These, importantly, include water. On the other hand, the non-polar "tail" of the molecule is fully miscible with the dominant, non-polar oil content within the production flow (see asphaltenes 3.5 below).

The intrinsic feature of the basic product which gives rise to its performance is the ability of **PMI-107** to retain all the elements in the flow of produced crude **as a homogenous stream whilst keeping the droplets of water separate from the droplets of oil**. This results in all the impurities (such as carbonates, salts, sulphur, waxes, asphaltenes, among others) whether they be dissolved in water or entrained in oil, remaining combined as an integrated stream whilst **the whole remains in motion**. This is inherent in the chemical structure of **PMI-107**. Furthermore **PMI-107** is an organic substance which offers a further benefit. There is the natural tendency for organic materials to be adsorbed onto steel surfaces. As a result, once **PMI-107** is applied to the system **it immediately forms a protective film on steel contact surfaces which prevents the onset of corrosion, wax accretions and reduces drag**.

Application is by continuous metered dosing into the oil stream. The point of injection should be as far upstream as possible so that all downstream contact surfaces can benefit, e.g, through a capillary line down the tubing. The product is water miscible and eventually drops out with the water phase once kinetic activity ceases.

### PHYSICAL AND CHEMICAL PROPERTIES

Colour:	Amber
Odour:	Mild amine
Physical State:	Liquid.
pH	4.5 to 5.5
Flash Point:	>150°C
Solubility:	Soluble in ethanol, miscible in water
Boiling Range:	IBP 100°C
Specific Gravity @25°C:	1.04 SG

### PACKAGING and SHELF LIFE

200 litre plastic drums, IBCs or bulk. Shelf life is 3 to 4 years when in covered storage.