## **BLU OIL**

Cationic polymer, de-emulsifier, used to separate into two distinct phases of oil and water from oil emsions (natural or synthetic) so-called "lean", in which the water is at a higher percentage than the oil and from many different industries: mechanical, steel, mining and refining of oil, food, manufacturing, etc.

Its use allows to improve the physical breakdown of the emulsions in flotation processes, or centrifugation.

It 'a liquid product easy to use with very low doses, is not dangerous and is not subject to ADR.

The BLU OIL can be used in neutral or alkaline environment:

- · in a batch of emulsions,
- · in the continuous treatment of emulsions.

Simple bench test will determine the amount needed: after mixing with the Blue Oil (also pre-diluted) you get to the clear separation of the two phases, aqueous and oily.

Warning: overdose can lead to re-emulsifying.

The range of de-emulsifiers for emulsions "lean" is completed by the BLUE OIL 2C 1, BLUE OIL R 1 and R 1F. These cationic polymers mixed base to be used alternatively to the BLU OIL to achieve the best performance according to the different composition of the emulsions to be treated.

## BLU OIL INSTRUCTIONS FOR INDUSTRIAL TREATMENT

Is carried out first in the de-emulsion equalization tank of the following wastewater:

- · oily water
- · oily emulsions, oil sludge
- · remediation water containing oil

The following describes the de-emulsion steps:

- store 50-60 cubic meters of wastewater,
- stir with a nitrogen stream (alternatively compressed air) the wastewater in the tank, to give uniformity to the material,
- · check the conditions of pH of the mixture,
- add the de-emulsifier: 2 to 5 ppm (liters per cubic meter),
- · continue the agitation of the solution,
- stop agitation and decant a few hours (or overnight) to encourage the separation of the two phases (oily upper, lower aqueous),
- the lower aqueous phase is transferred in the storage tanks for subsequent chemical-physical finishing treatment,
- the upper oily phase (supernatant) is transferred into the storage tank for recovery of oil sludge.

**WARNING:** Make sure that before the addition of BLUE OIL the wastewater has homogeneous alkaline pH (> 8).

## INSTRUCTIONS FOR BLU OIL THE TREATMENT OF BATCH EMULSION

The de-emulsion with Blue Oil is made in the collection tank of the oily wastewater to encourage the separation of the oily phase from the aqueous phase.

The following steps describe the de-emulsion phases:

- · collect the emulsion in the storage container,
- operate the agitator to facilitate the homogenization of the solution to be treated (alternatively with a current of nitrogen or compressed air taking into account the stripping phenomena),
- · check the conditions of pH of the mixture,
- add the Blue Oil: from 2 to 5 ppm (liters per cubic meter),
- · continue the agitation of the solution,
- stop agiatating and decant for a time varying between half an hour and a
  few hours (the sedimentation time will indeed increase with the increase
  of the content of oil and sludge) to encourage the separation of the two
  phases (oily upper, aqueous bottom),
- possibly facilitate the separation of the phases by the addition of a coagulant (ferric chloride, aluminum chloride) and increase the size of "flakes" dosing of polyelectrolyte,
- the lower aqueous phase, pollutant-free, will then return to the industrial cycle,
- the upper oil phase is collected and delivered to authorized collectors.

**WARNING:** Make sure that before the addition of BLUE OIL the wastewater homogeneous has alkaline pH (> 8).