BEST DRILLING CHEMICALS
SINCE 1976

Guamol

Guamol is special organic polymer. The product is used to improve the viscosity of water based drilling muds. Guamol mud does not react with monovalent and bivalent ions as Na+, K+, Ca++, Mg++ but it decomposes itself after 48 hours. Therefore, some biocides should be added to prevent fermentation when an expected use of the Guamol mud is more then 48 hours. After the drilling and installation works a structure of the Guamol mud should be degraded to allow a minimization of the formation damage and the high water flow return. A full control of the mud and mud cake decomposition process is achieved by using of biocide during drilling and installation works and oxidizing agent to brake the mud structure. The Guamol mud is commonly used in water wells, mineral, oil & gas exploration drilling operations and earth engineering works.

Mud formulation

Guamol mud is composed of the following: [per one cubic meter of water]

Soda Ash Na2C03	**1-4 kg**
Guamol	**3-5 kg**

Above components are specified in sequence of adding [mixing]

Mud preparation procedure

- Soda Ash is added to water to increase pH to 8,5-9,0
- Guamol to obtain the required rheological parameters

When mixing of components the care should be taken to avoid a creation of lumps and aggregates of Guamol. After mixing of the polymer and adding the Modicide 340, the mud should be circulated in a tank by the mud pump for min. 15 min.

Control of mud parameters

Initial mud parameters:

density	1,02 g/cm3

funnel viscosity	42-48 s
pH	9
plastic viscosity	~12 mPas
yield point	~24 lbf/100ft2

Adjustment of parameters

pH – is increased by Na2C03 or NaOH and it should be maintained on the 8-9 level. Adding of agents should be done gradually and pH should be measured frequently.

Viscosity and yield point – This is a mud carrying capacity which is increased by adding the Guamol. Content of the polymer must not exceed 6 kg/m3 to avoid gelling effect.

Mud density – to enhance stability of borehole [excavation] wall the mud density should be increased by adding the water–soluble salts as NaCl, CaCl2. Sodium chloride is capable to reach the density of its water solution to 1220 kg/m3 and calcium chloride to 1440 kg/m3.

Decomposition of mud and mud cake

To accelerate the decomposition of mud and mud cake a calcium or sodium hypochlorite should be used. After adding of 2-6 kg/m3 of these oxidizing agents a complete decomposition of the mud will occurred. Additionally, the use of products will provide disinfection of water and rock formations. Guamol mud is harmless for environment. Products of the mud decomposition are water and solids. Water could be disposed in sewage water systems and solids should be handled according to local regulations.

Packaging

25 kg bags, 1000 on pallet. 1000 kg big bags