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## Preparation of High Effective Flocculant for High Density Waste Drilling Mud

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### ABSTRACT

To satisfy the requirement on the separation of solid and liquid in waste drilling mud, prepare a high effective flocculant for high density waste drilling mud used starch, 2-Trimethylammonium ethyl methacrylate chloride (DMC) and acrylamide (AM). The result showed that when the ratio of starch, DMC and AM was 2:1:3, the weight of initiator (potassium persulfate) was 0.2% of the AM, reaction temperature was 65°C and reaction time was 5h, the performance of product was the best. The water content in filter cake was 27.6% after the waste drilling mud disposed by the optimization flocculant. The flocculent effect of optimization flocculant was superior to that of other flocculant in market.

### KEYWORDS

High Density, Waste Drilling Mud, Dispose, Cation

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### References

- [1] M. J. Yang, W. L. Liang, Q. R. Jin, X. H. Wu and G. N. Yu, "Study on Comprehensive Treatment Technique about Waste Drilling Mud," *Mineral Petrology*, in Chinese, Vol. 23, No. 1, 2003, pp. 109-112.
- [2] M. O. Benka and A. Olumagin, "Effects of Waste Drilling Fluid on Bacterial Isolates from a Mangrove Swamp Oilfield Location in the Niger Delta of Nigeria," *Biore-source Technology*, Vol. 55, No. 3, 1996, pp. 175-179.
- [3] S. Rehan and H. Tahir, "A Fuzzy-Based Methodology for an Aggregative Environmental Risk Assessment: A Case Study of Drilling Waste," *Environmental Modelling & Software*, Vol. 20, No. 1, 2005, pp. 33-46.
- [4] C. G. Street and S. E. Guigard, "Treatment of Oil-Based Drilling Waste Using Supercritical Carbon Dioxide," *Journal of Canadian Petroleum Technology*, Vol. 48, No. 6, 2009, pp. 26-29.
- [5] H. Shang, S. Kingman, C. Snape and J. Robinson, "A New Technology of Microwave Treatment of Oil Contaminated Drilling Waste in a Single Mode Cavity," *Acta Petrolei Sinica (Petroleum Processing Section)*, in Chinese, Vol. 25, No. 3, 2009, pp. 358-362.
- [6] J. A. Veil, "Drilling Waste Management: Past, Present, and Future," *Proceedings of SPE Annual Technical Conference and Exhibition*, San Antonio, 29 September-2 October 2002, pp. 545-551.
- [7] ASME Shale Shaker Committee, "Drilling Fluids Processing Handbook," Gulf Professional Publishing, Burlington, 2005.

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