

DEDICATION

To my motherMy first teacher

To my father My guide

To my brothers, sisters

To my friends

To all those unbelievable persons

I am trying to say thank you

Elsir M. Adil

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ACKNOWLEDGEMENT

We devote our deepest gratitude to our supervisor prof. Ahmed Elsadig in this humble work for his comments, direction, academic support...To our parents whom stands with us...to central lab in Khartoum university, chemistry department in SUSTECH.

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Abstract:

Potassium Chloride is one of the simplest and commonly used inorganic salt.

This study aims to determine the purity of commercial Potassium Chloride used in Drilling fluid. Two samples (Jordan sample and Russian sample) of the salt were analyzed for K^+ , Cl^- , Ca^{+2} , Na^+ and moisture content.

The results compared with standard Potassium Chloride accordingly the purity of the Jordan sample was found to be greater than that of the Russian sample.

الخلاصة

كلوريد البوتاسيوم يعد من ابسط الاملاح غير العضويه ومن اكثرها استخداما .

تهدف هذه الدراسه لتحديد درجة نقاء هذا الملح في عينتين تجاريتين (عينة ملح اردنيه وعينة ملح روسيه).

اخضعت كل عينه للتحليل لتحديد تراكيز كل من ايونات (البوتاسيوم ,الصوديوم, الكالسيوم والكلورايد) وتحديد القلويه للعينتين .

أظهرت النتائج بعد مقارنة قراءات كل عينة مع قراءات عينة قياسية من ملح كلوريد البوتاسيوم ان درجة نقاء عينة الملح الاردني كانت اكبر من درجة نقاء عينة الملح الروسي .