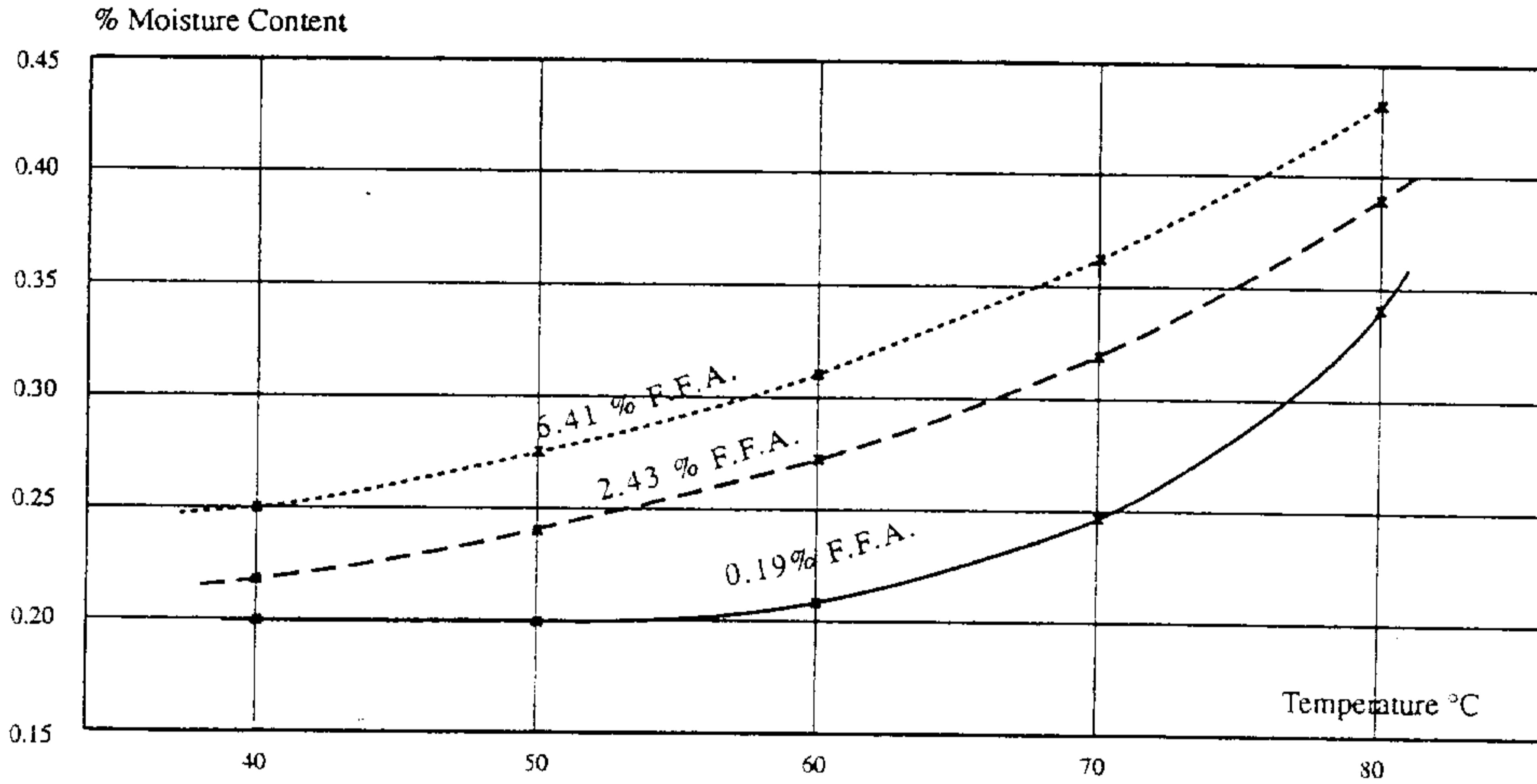


DATA SHEET FOR ENGINEERS

Solubility of Water in Palm Oil Versus Temperature and Initial FFA Content



Note:

The above figures were obtained from tests with palm oil of Congo origin, particularly within the range of temperature 50°C to 80°C and the range of 0 to 7% FFA. The figures follow closely the following equation:-

$$S = 0.198 + 0.0112 (FFA) + 0.00467 (t-50)$$

- Where S = Solubility - % of water
- FFA = Free fatty acid - % of palmitic acid
- t = Temperature in degrees centigrade

The equation enables an assessment to be made of the solubility in routine conditions for a naturally acidified oil. In other words, it provides an estimate of the maximum moisture content likely to be found in oil at the outlet of a perfectly set industrial centrifugal purifier in which no dehydration takes place as a result of evaporation through contact with air.

(J.H. Maycock - Extracted from the MONGANA Report)