

Crystallinity and OTR

The relationship between crystallinity and OTR is shown in the following.

(1) Relational Expression

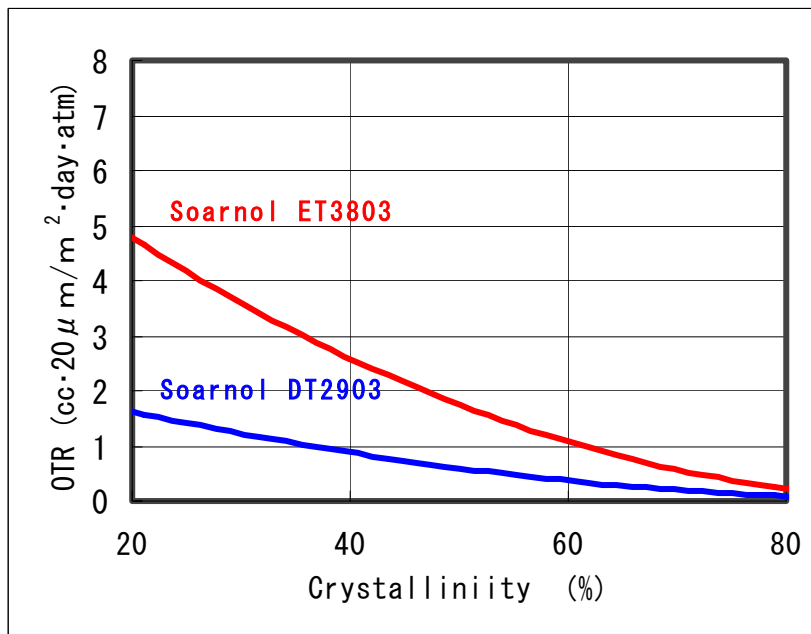
The relationship between crystallinity and OTR is shown by the next formula.

$$\frac{P_c}{P_a} = (1 - 0.01x)^{2.1}$$

- here X : crystallinity (%)
Pa : OTR of amorphous polymer (0% crystallinity)
Pc : OTR of polymer having X(%) crystallinity

A relational diagram for typical “Soarnol®” was obtained by DSC method.

(2) Result



Each “Soarnol®” shows high barrier property in case of high crystallinity. Generally, 40-50% crystallinity can be gained by normal processing condition.

Data Prepared : 1 Sep. 2003

