

SOLVENT SWELLING STUDIES OF SOMA LIGNITE (TURKEY)

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The volumetric swelling procedure was applied to Turkish Soma lignite using thirteen solvents to investigate the cross-linking in its macromolecular network. The theory of solvent swelling of cross-linked polymers developed by Flory and Rehner and extended by Kovac and Peppas was used to calculate number-average molecular mass per cross-link of organic structure (\bar{M}_c) in lignite samples. The results show that the volumetric solvent swelling of Soma lignite samples in non-polar and polar solvents roughly follows the regular solution theory.

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