
(PAH)

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x x

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(PAHs)

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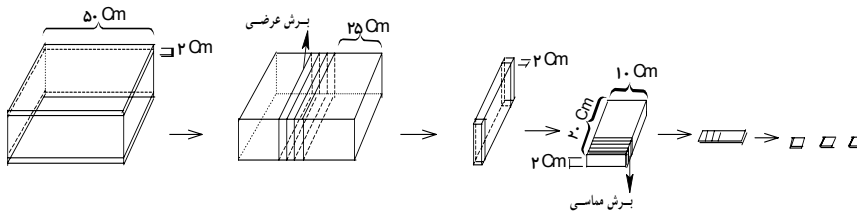
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(CH₃OH)

(CH₂Cl₂)

/ /

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... (PAHs)

(/)

C	B	A	C	B	A	C	B	A	* (h)
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() :A*
 () :B
 () :C

(/)

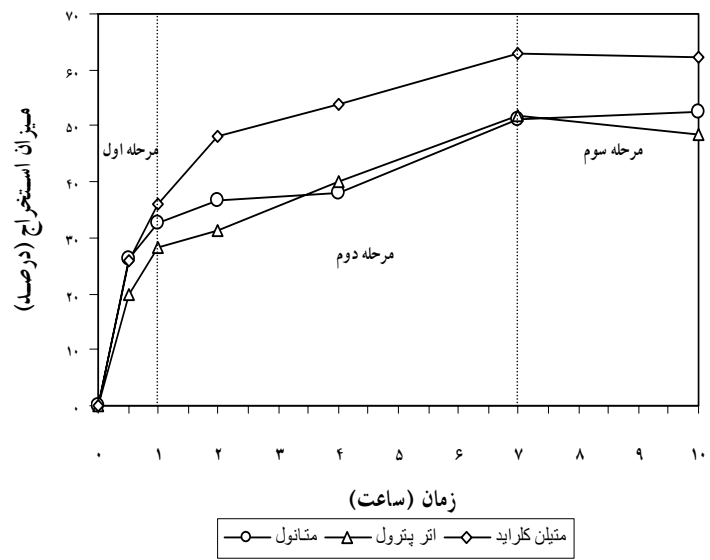
C	B	A	C	B	A	C	B	A	* (h)
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() :A*
 () :B
 () :C

(/)

									* (h)
C	B	A	C	B	A	C	B	A	
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() :A *
 () :B
 () :C



...

(PAHs)

$$E = -0.02T^3 + 0.14T^2 + 3/46T + 28/31$$

$$E = 0.99T^3 - 2/26T^2 + 17/15T + 21/11$$

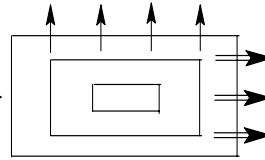
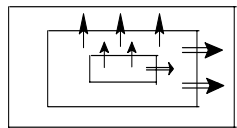
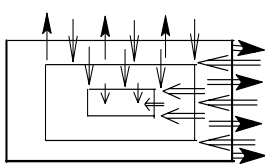
$$E = -0.03T^3 + 0.01T^2 + 6/26T + 20/08$$

T: ()

E: ()

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Study on Poly-Aromatic Hydrocarbons (PAH) in Recycling of creosote-treated Timbers. Part 1: Solvent extraction of creosote from creosote-treated solid wood

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(Received 10 October 2006, Accepted 22 May 2007)

Abstract

Creosote-treated wood products can be considered as an important source of fiber in wood industries. Often it is necessary to extract the creosote as a byproduct to activate natural bonding in wood fibers like untreated wood or increasing the bonding capacity by adhesive substrates. In this research, woodchips obtained from Iranian beech (*Fagus orientalis*) railway-tie, solvent extracted by methanol, methylene chloride and petroleum ether during ten hours in boiling condition to leach out creosote from waste-treated wood. The extracted materials were measured after half an hour, one, two, four, seven and ten hours and compared with the initial quantity of creosote in the waste-treated wood. The results showed that half of all extractable creosote was leached out at the first hour of extraction period, and extending the process time over seven hours was no longer efficient. The maximum yield of creosote extraction from woodchips with mean dimensions of 22 × 18 × 4 mm was measured to be 51-67 percent by immersion method and selected solvents.

Keywords: Creosote, Organic Solvent, Extraction, Creosote-treated Wood, *Fagus orientalis*