

Title (en)

Pitch for carbon fibers, process for production of said pitch, and process for production of carbon fibers using said pitch.

Title (de)

Pech für Kohlefasern, Verfahren zu dessen Herstellung und Verfahren zur Herstellung von Kohlefasern mit Verwendung dieses Pechs.

Title (fr)

Brai pour fibres de carbone, procédé pour la production de ce brai et procédé pour la production de fibres de carbone utilisant ce brai.

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Application

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Priority

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Abstract (en)

The present invention relates to a process for producing pitch for use in production of carbon fiber which comprises subjecting a pitch starting material to a first stage heat treatment at a temperature of 380 to 500 DEG C under a pressure of 1 to 1,500 mmHg and then to a second stage heat treatment at a temperature of 450 to 550 DEG C under a pressure of 0.1 to 20 mmHg, wherein the pitch starting material has a number average molecular weight of 300 to 500, weight average molecular weight/number average molecular weight of 1.5/1 to 2.2/1, a boiling point of at least 450 DEG C, a residue content as determined by heating up to 800 DEG C in nitrogen gas at a rate of 10 DEG C per minute of not more than 5% by weight, and a peak area at the starting point as determined by developing on a silica gel thin layer with a mixed solvent of 95% by volume of dichloromethane and 5% by volume of methyl alcohol of not more than 1%. The present invention further relates to novel pitch for use in production of carbon fibers as obtained by the above process and a process for producing carbon fibers using said pitch. According to the present invention, the pitch capable of providing carbon fibers having a high tensile strength and a high knot strength can be obtained.

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IPC 8 full level

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