

The World's First Successful Mass Production

Registration No.	Number 00225		
Registration Date	September 13, 2016	Registration Category	Category 1

Name (Model, etc.)	Coal Tar Pitch based Carbon Fiber DIALEAD
Location	Sakaide, Kagawa
	Mitsubishi Chemical Corporation
Owner (Custodian)	Mitsubishi Chemical Corporation
Manufacturer (Company)	Mitsubishi kasei Industries Ltd.
Year Manufactured	1999
Year first appeared	1984
Reason For Selection	<p>This item is DIALEAD K63712, the de facto standard coal-tar pitch based carbon fiber and the first to be successfully mass produced.</p> <p>Currently, pitch-based carbon fiber is four times lighter, ten times stronger and four times more rigid than iron, and also has the negative thermal expansion coefficient and twice thermal conductivity of copper. Composite materials utilizing these properties have been used in many areas, including satellites, high-precision radio telescopes, concrete structure reinforcing, industrial rolls and robotic hands. Applications of this new, high-performance material are breaking new ground in many fields, such as industrial development, energy conservation, resource conservation, environmental conservation, and safety and security in everyday living.</p>
Registration Standard	<p>1-B (Show a uniquely Japanese scientific or technological development from an international perspective.)</p> <p>2-A (Played a notable role in improving people's way of life and creating new ways of living.)</p>

Open/Closed to Public	Closed to Public
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Photo	 <p>The image shows three spools of dark, textured carbon fiber yarn. The spools are arranged in a slightly overlapping row, with the central one being the most prominent. Each spool has a light-colored wooden or bamboo core. The yarn is tightly wound and has a fibrous, slightly irregular appearance.</p>
Other useful information	