

Light, Strong Composite Material

Registration No.	Number 00154		
Registration Date	September 2, 2014	Registration Category	Category 1

Name (Model, etc.)	Structural Prepreg for Aircraft
Location	Hiratsuka City, Kanagawa
	The Yokohama Rubber Co., Ltd.
Owner (Custodian)	The Yokohama Rubber Co., Ltd.
Manufacturer (Company)	The Yokohama Rubber Co., Ltd.
Year Manufactured	1978-1979
Year first appeared	1978
Reason For Selection	The first recognized domestically produced aircraft structural prepreg to meet the rigorous quality control demands of US company Boeing. Prepreg refers to sheets of fiber backing impregnated with thermo setting resin, which are overlapped into predetermined shapes and then thermoset to form fiber-reinforced plastic (FRP). FRP is the main technology behind making aircraft more lightweight and there has been an increasing demand for it since the 1960s. The polymer alloy formulations, partial reactions and other processing technologies that went into this material made it the first material to successfully meet the high performance requirements. The prepreg from that time, which underwent hundreds of checks in the certification examination, is still around today. This material is designated for use in aircraft secondary structural members (the leading and trailing edges of the wings, etc.) and still has exactly the same composition and performance. In recent years, aircraft FRP material has increased in its rate of application, such as carbon fiber FRP being used in primary structures of 787 passenger planes.
Registration Standard	1 - A(Show an important aspect or stage of the development of science and technology.)

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Other useful information	