

## 시험성적서 CERTIFICATE

Test Report No. 2015-03-002027

**■**original

**□**reissued

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1. Client: GRAPHENE SQUARE INC.

2. Product name: Graphene on Quartz glass

3. Request date and number: September 30, 2015,

No. 2015-03-002027



4. Test results

Items	Results	Test Methods
State	Solid at 20 °C	With reference to * KHMSCA
Flash Point (Closed Cup)	No flash occurred under 93 ℃	KS M ISO 3679 : 2003 Rapid equilibrium method
Autoignition Temperature	No spontaneous combustion under 200 °C	ASTM E659 (78) : 2005
рН	6.5 ~ 7.5 * Sample : H <sub>2</sub> O = 1 : 5 ( <i>V/V</i> )	With reference to KS I ISO 10390 : 2005
Density	2.3 at 20 ℃	KS M 0602 : 2010
Burning Time/Rate Test	Did not ignite. at 20 ℃  ※ Hazard Criteria: > 2.2 mm/s	** UN TDG Test N.1
Spontaneous Combustion Test	No spontaneous combustion at 20 °C	UN TDG Test N.2
Water Contact Test	No water reaction hazard at 20 ℃ - Rate of gas emission: 0 L/kg·h	UN TDG Test N.5
Pressure Vessel Test	No self-reaction hazard  - No rupture of the 0.6 MPa disc of the vessel  * orifice range = (0.6 ~ 9.0) mm	UN TDG Test E.3

\* KHMSCA: Korea Hazardous Materials Safety Control Act.

\*\* UN TDG: UN Recommendations on the Transport of Dangerous Goods - Tests and Criteria.

: 1. These are the results tested with the sample provided by the above mentioned client.

2. This certificate cannot be used for advertisement, administrative litigation or lawsuit.

October 06, 2015

Vincent Park. Technical Manager:

