



Notified Body No. 1121

**UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
CERTIFICATE OF TYPE APPROVAL**

(EC Certificate of Type Examination-96/98/EC Directive Module B)

Certificate Number: 164.112/1121/WCL MED0347TE

Applicant:- **Advanced Coating Solutions LLC** Advanced Coating Solutions LLC
Address:- 2716 106th Pl SE, Bellevue, Washington, 98004, United States of America 2716 106th Pl SE, Bellevue, Washington, 98004, United States of America

This is to certify that the applicant has submitted details of a Paint system with Low flame-spread characteristics and low smoke and toxic fume emissions (Item Number A.1/3.18b), known and designated as:-

"ACS CIC - Ceramic Insulation Coating"

having the technical specification given in the schedule of equipment on this certificate which has been tested and complies with the recommended criteria given in the following methods, published by the International Maritime Organisation, and which are contained in the relevant parts of the International Code for Application of Fire Test Procedures (FTP Code) namely:-

- IMO Resolution MSC 307 (88) Annex 1 Part 5
- IMO Resolution MSC 307 (88) Annex 1 Part 2

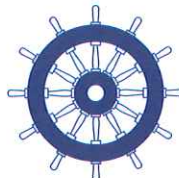
This certificate is issued on behalf of the Maritime and Coastguard Agency (MCA). The system complies with the relevant international testing standards under which legislation (The Merchant Shipping Marine Equipment) Regulations 1999 and also the Marine Equipment Directive 96/98 amended by Directive 98/95, as amended.

The manufacturer is allowed to affix the U.S. Coast Guard approval number 164.112/1121/WCL MED0347TE as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" signed February 27th, 2004.

Manager
Warrington Certification Limited
Holmesfield Road
Warrington WA1 2DS

Date of Issue: 22nd May 2012
This certificate is valid until: 21st May 2017

This certificate is not valid for equipment, the design or manufacture of which, has been varied or modified from the specimens tested.



This certificate does not entitle the use of the Mark of Conformity, which requires an additional module, either D, E or F.

Under the terms of the Merchant Shipping (Marine Equipment Regulations 1991) Warrington Certification Ltd. has been notified to the European Commission by the Maritime and Coastguard Agency as a body authorised to conduct Type Examinations under the provisions of the European Council Directive 96/98/EC on Marine Equipment and issue Certificates of Type Approval.

Certificate of Type Approval Schedule of Equipment

The applicant declared that the following comprises an accurate description of the system type to which this certificate applies.

General description		Ceramic-loaded latex thin insulation coating
Overall coating system thickness		Between 1mm and 2mm (40-80 mils)
Overall thickness of composite		4.84mm (determined by Exova Warringtonfire)
Overall weight per unit area of composite		27.31kg/m ² (determined by Exova Warringtonfire)
Coating	Generic type	Ceramic-loaded acrylic latex insulation coating
	Product reference	"ACS CIC - Ceramic Insulation Coating"
	Name of manufacturer	Advanced Coating Solutions LLC
	Colour	"White"
	Number of coats	Two (The sponsor stated that the product can be applied in thinner coats to generate the same total application rate)
	Application rate per coat	0.3mm - 0.6mm (12 mils – 24 mils / 0.012"-0.024") (wet film thickness)
	Application method	Spray applied
	Flame retardant details	The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product.
	Curing process per coat	1-4 hours per coat to air dry at 50°F/10°C, 72 hours for the acrylic resin system to cure and harden at 60°F/16°C
Substrate	Product reference	"A36"
	Generic type	A36 mild steel plate
	Name of manufacturer	The sponsor was unable to provide this information
	Thickness	3mm (1/8", 0.125")
	Weight per unit area	0.21kg/m ² (5.094 lbs per square foot)
	Flame retardant details	The substrate is inherently flame retardant
	Preparation details	Alcohol wipe over the bare steel
Brief description of manufacturing process of coatings		Product is mixed with processes similar to acrylic latex coatings

The under noted documents have been approved for compliance with the relevant requirements of International Conventions and European Union Legislation for the EC Type examination of Marine Equipment for use on Ships Registered in the European Economic Area.

Approved Documents - Test Reports

- (1) WF No. 318275 (dated May 2012) Surface Flammability test to IMO Resolution MSC 307 (88) Annex 1 Part 5.
- (2) Smoke and Toxicity is satisfied by meeting the total heat release (Q_t) and peak heat release (Q_p) as stated in IMO Fire Test Procedures Code, Annex 2, Section 2.2.

Limitations of Use: (IMO Resolution MSC 307 (88) Annex 1 Part 5 Clause 3)

The test substrate was 3mm steel therefore this product can be applied to any metallic base of similar or thicker substrates (metallic bases such as steel, stainless steel or aluminium alloy).

It is not approved to apply to non metallic non combustible materials

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