



## Type Approval Certificate

*This is to certify* that the undernoted product(s) have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

<b>PRODUCER</b>	Gutteling B.V. Pelserstraat 9 3044 CH ROTTERDAM The Netherlands	
<b>PRODUCT DESCRIPTION</b>	Composite hoses	
<b>PRODUCT TYPE</b>	Multi – Chem Red Multi – Oil Blue Multi – Chem Green Multi – Chem Black Multi – Vapor Yellow Multi – LPG White Multi – LNG White	
<b>RATINGS</b>	<b>Bore diameter (mm)</b>	
	Multi – Chem Red	28 to 300
	Multi – Oil Blue	28 to 300
	Multi – Chem Green	28 to 300
	Multi – Chem Black	28 to 300
	Multi – Vapor Yellow	50 to 300
	Multi – LPG White	28 to 250
	Multi – LNG White	28 to 300
	<b>Max. Working pressure (bar)</b>	
	Multi – Chem Red	7 / 10.5 / 14
	Multi – Oil Blue	7 / 10.5 / 14
<b>Certificate No.</b>	17/30021	
<b>Issue Date</b>	26 March 2017	
<b>Expiry Date</b>	25 March 2022	
<b>Sheet</b>	1 of 2	

Lloyd's Register EMEA  
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RATINGS (continued):

**Max. working pressure (bar):**

Multi – Chem Green	7 / 10.5 / 14
Multi – Chem Black	7 / 10.5 / 14
Multi – Vapor Yellow	7
Multi – LPG White	10.5 / 14 / 21
Multi – LNG White	10.5

**Temperature range ( °C ) :**

Multi – Chem Red	-20 to +100
Multi – Oil Blue	-20 to +100
Multi – Chem Green	-20 to +100
Multi – Chem Black	-20 to +100
Multi – Vapor Yellow	-20 to +100
Multi – LPG White	-50 to +50
Multi – LNG White	-196 to +50

APPLICATION

Oil, Chemical, LPG and LNG systems.

STANDARDS

Rules and Regulations for the Classification of Ships, July 2016  
 Rules and Regulations for the Construction and Classification of Ships for the Carriage of Liquid Chemicals in Bulk, July 2016  
 Rules and Regulations for the Construction and Classification of Ships for the Carriage of Liquefied Gases in Bulk, July 2016  
 IBC Code; IGC Code  
 EN 13765:2003; EN 13766:2003

OPERATIONAL LIMITATIONS

Hoses are to be selected and installed in accordance with the manufacturer's instructions and recommendations..

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations

A periodical assessment of the Product Quality Assurance will be required to maintain the validity of the Type Approval of the product. This assessment by LR Surveyor is required 30 months after the date of issue of this Certificate.

Certificate No.	17/30021
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