Certificate No: LR2006602TA
Issue Date: 13/02/2020
Expiry Date: 12/02/2025

Type Approval Certificate

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

Manufacturer	**Youli Holdings Group Co., Ltd**
Address	No 8-88, Xingye North Road, Liushi, Yueqing, 325604, China
Place of Production	Youli Holdings Group Co., Ltd No 8-88, Xingye North Road, Liushi, Yueqing, 325604, China
Type	Plastic Pipes
Description	Thermoplastics Pipes and Fittings
Trade Name	"Youli" PVC-C "Youli" PVC-U
Application	Marine and offshore piping systems for sea water, fresh water, sanitary/drains/ scuppers and non-essential services in locations listed in Part 5, Chapter 12, Table 12.5.1 of Lloyd's Register's Rules and Regulations for the Classification of Ships where a "0" is indicated.
Specified Standard	LR Rules and Regulations for the Classification of Ships, July 2019 IMO Resolution A.753(18), as amended by IMO Resolution MSC.313(88) IMO Resolution A.653(16) ISO 75-3 : 2004 ISO 9142 : 1990 ASTM D883 ASTM D257 ISO 10508 : 2006

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Qing Dong

Specialist to Lloyd's Register Classification Society (China) Co Ltd
A member of the Lloyd's Register group

19th Floor, 550 Yan An dong Road, Shanghai,
Huangpu District, China

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ISO 4433-1 : 1997

Ratings

PVC-C

Nominal Out Diameter (mm):	20~160
Nominal Pipe Thickness (mm):	2.2~11.8
Nominal Pressure Rating (bar):	16
External Pressure Rating (bar):	1.0
Working Temperature Range (˚C):	0~80

PVC-U

Nominal Out Diameter (mm):	20~160
Nominal Pipe Thickness (mm):	2.2~11.8
Nominal Pressure Rating (bar):	16
External Pressure Rating (bar):	1.0
Working Temperature Range (˚C):	0~60

Additional Tests

Flame spread test is to be conducted according to IMO Resolution A.653(16).

Other Conditions

1. Plastic pipes and fittings intended for application in Class I, Class II and Class III systems for which there are Rule requirements, are to be manufactured in accordance with Chapter 14 of LR Rules for Materials and to be manufactured and tested in accordance with Part 5, Chapter 12, Section 5 of the Rules and Regulations for the Classification of Ships.
2. Suitable pipes and fittings are to be selected and installed in accordance with the manufacture's instructions. The temperature-pressure reduction is to the manufacture's recommendation.
3. The use of plastics pipes may be restricted by statutory requirements of the National Authority of the country in which the ship is to be registered.

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This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Classification Society (China) Co Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document No. LR2006602TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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