

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Gaskets and Sealings**

with type designation(s)
Flame-retardant rubber gasket (EPDM)

issued to

Shandong Xuyang Automotive Technology Co., Ltd.
Rizhao, Shandong Province, China

is found to comply with

GB/T 9126.1-2023 – Non-metallic flat gaskets for pipe flanges – Part 1: PN designated
GB/T 12622-2008 – Standard test method for compressibility and recovery of gaskets for pipe flanges
GB/T 12385-2008 – Standard test method for sealability of gaskets for pipe flanges
UL 94:2017 Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.
for details: Refer to section Application in the certificate.

Temperature range: -50°C to 150°C

Max. working press.: 16 bar (PN16)

Design: flat gasket from EPDM without inlet

Sizes: DN800: OD 920 x ID 800 (PCD: 872) x Thickness 5 [mm]

Issued at **Hamburg** on **2025-12-08**

This Certificate is valid until **2030-12-07**.

for **DNV**

DNV local unit: **Qingdao NB & CMC**

Approval Engineer: **Thilo Pabst**

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This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

PRODUCT DESCRIPTION

Asbestos free flame-retardant rubber gasket - full face type (FF), with bolt holes for flat face flanges.
 Made from EPDM without inlet.
 Designed acc. Standard GB/T 9126.1-2023 - *Non-metallic flat gaskets for pipe flanges - Part 1: PN designated.*
 Flame retardant acc. UL94-2017 - Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

Properties:

Technical data	unit	Values for Flame-retardant rubber gasket ¹	Standard
Nominal diameter	DN / mm	DN 800 / OD 1025 x ID 820 (PCD: 950)	GB/T 9126.1-2023
Sealing high	mm	5	./.
Material	./.	EPDM	GB/T 42268-2022
Pressure Rating	./.	PN16	GB/T 9126.1-2023
Temperature Range	°C	-50°C to 150°C	./.
Compressibility	%	9 to 16	GB/T 12622-2008
Recovery	%	≥ 50	GB/T 12622-2008
Leakage rate (ambient T)	cm ³ /s	≤ 1x10 ⁻³	GB/T 12385-2008

Note1: values partly depending on size and temperature

APPLICATION

This is a Non-Class Type Approval Certificate (TA-NONCL - for products where a Type Approval is not mandatory) on basis of test according to international standards.

The above listed rubber gasket may be used under consideration of the mechanical and technical characteristics as well as physical and chemical properties for the following applications:

- On board of ships and other structures classed by DNV and specified in DNV Rules Pt.4, Ch.6 Piping systems in non-main class applications in piping systems class III e.g.
 - Sea water
 - Domestic warm water heating systems
 - Cold water systems
 - Potable water systems (only Pipe 9600 NiroSan-ECO)
 - Compressed Service Air, non-essential
 - Sanitary drains
 - Non-essential systems

The selection of the gaskets for the corresponding application and appropriate installation has to be in accordance with the instructions of the manufacturer.

Piping/Gaskets shall be hydrostatically tested: 1.5 times of the system design pressure (DNV Pt.4 Ch.6 – Piping)

Limitation / Exclusions

Other application than above mentioned, especially:

- Cargo and machinery lines on Oil Tanker as well as Chemical- and Gas tankers carrying oil, flammable gases, noxious media, propylene oxide and mixtures of ethylene and propylene oxide.
- Pipelines for LNG and flammable gas systems and cryogenic fluids.

TYPE APPROVAL DOCUMENTATION

TESTS CARRIED OUT

Documentation of tests performed are the basis for this Type Approval as referenced in the list above and DNV Ref.-Nos. 262.1-044689

MARKING OF PRODUCT

For traceability to this Type Approval products shall bear legible and durable marked as following:

- Manufacturer's registered trademark:
- Size: (in DN...)
- Nominal Pressure: PN...
- Material:
- Applicable Standard:

Sample picture



PERIODICAL ASSESSMENT

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with (refer to the Class Programme DNV-CP-0338, Sec. 4).

To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE