

CERTIFICATE NUMBER EFFECTIVE DATE EXPIRY DATE ABS TECHNICAL OFFICE 20-2026037-PDA 26-Aug-2020 25-Aug-2025 Houston ESD - Piping

#### CERTIFICATE OF

# **Product Design Assessment**

This is to certify that a representative of this Bureau did, at the request of

## **GARLOCK SEALING TECHNOLOGIES**

located at

### 1666 DIVISION STREET, PALMYRA, NY, United States, 14522

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

**Product Gasket** 

Model 3000 & 3200

This Product Design Assessment (PDA) Certificate remains valid until 25/Aug/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping
Yongjin Lee, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

#### GARLOCK SEALING TECHNOLOGIES

1666 DIVISION STREET

PALMYRA NY

United States 14522

Telephone: 1-800-448-6688

Fax: 1-800-543-0598

Email: gasketapps@garlock.com

Web: www.garlock.com

#### Tier: 3 - Type Approved, unit certification not required

**Product:** Gasket Model: 3000 & 3200

**Intended Service:** 

Marine & Offshore Applications - Style 3000: Gasketing for Water, Aliphatic Hydrocarbons, Oil & Gasoline; Style 3200: Saturated Steam & Inert Gases.

#### **Description:**

Garlock Blue-Gard 3000 manufactured with aramid fibers with a Nitrile Binder; Garlock Blue-Gard 3200 manufactured with aramid fibers with a SBR Binder.

#### **Rating:**

3000:

Temperature Maximum: +700 °F (+371 °C);

Temperature Continues Maximum: + 400 °F (+205 °C):

Temperature Minimum: -100 °F (-73 °C); Pressure Maximum: 1000 psig (70 bar);

PxT Rating (psig x °F) or (bar x °C): 350,000 (12,000) for 1/16", 250,000 (8,600) for 1/8";

#### 3200:

Temperature Maximum: +700 °F (+371°C);

Temperature Continues Maximum: +400 °F (+205 °C);

Temperature Minimum: -100 °F (-73°C);; Pressure Maximum: 1200 psig (83 bar);

PxT Rating (psig x °F) or (bar x °C): 350,000 (12,000) for 1/16", 250,000 (8,600) for 1/8";

For Specification details see attached "pdf"

#### **Service Restriction:**

- 1) Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- 2) Gaskets are not considered "Fire Safe" and are not to be used in Firemain, Sprinkler, Foam and other Fire Fighting Systems in accordance with ABS Requirements.

#### **Comments:**

Duplicate PDA resides with Garlock de Mexico SA de CV - Mexico.

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

#### **Notes/Drawing/Documentation:**

Declaration of Conformity 3000 & 3200 Dated 18 May 2020 (New York) Declaration of Conformity 3000 & 3200 Dated 26 May 2020 (Mexico)

#### **Terms of Validity:**

This Product Design Assessment (PDA) Certificate remains valid until 25/Aug/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for

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construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

#### **STANDARDS**

#### **ABS Rules:**

The Rules for Conditions of Classification, Part 1 2020 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2020 Rules for Building and Classing Marine Vessels, 4-6-1/3.5, 4-6-2/9.5 vi)

The Rules for Conditions of Classification, Part 1 2020 Offshore Units and Structures, 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2020 Rules for Building and Classing Mobile Offshore Units, 4-2-1/3.5

#### National

ASTM F152-95 (2017) Standard Test Methods for Tension Testing of Nonmetallic Gasket Materials ASTM F37-06(2019) (Method B) Standard Test Methods for Sealability of Gasket Materials.

#### **International:**

NA

#### **Government:**

NΑ

#### **EUMED:**

NA

#### **OTHERS:**

NA