



Adhesives & Sealants

BONDFLEX 450FC MARINE

Technical Data Sheet



Reviewed: 06.06.2025

DESCRIPTION

BONDFLEX 450 FC MARINE is a multi-purpose, marine grade polyurethane sealant and adhesive. It is suitable for bonding and sealing in the shipbuilding industry as well as in general constructions. It is used for sealing and bonding above and below the waterline, delivering strong and flexible bond. It can be used both internally and externally.

ADVANTAGES

- Fast curing
- Excellent resistance to aging, weather conditions and various chemicals
- Excellent adhesion and bonding strength to most materials used in shipbuilding industry
- Low VOC emissions
- Low isocyanate content
- Low odor
- Resistant to temperature changes -40°C to +90°C
- Excellent resistance to fresh and salt water and alkalis
- Non-corrosive
- High and permanent elasticity
- Non sagging
- Paintable

APPLICATIONS

- Elastic bonding and sealing in marine applications.
- Bonding and sealing of metal joints in marine applications.
- Bonding and sealing between various substrates such as wood, metal, 2-component epoxy or polyurethane paints, gelcoat, metal primers, plastics (GRP), ceramics and other common marine materials.

INSTRUCTIONS FOR USE

1. Surfaces must be clean, free of dust and grease.
2. In very warm and moist climates we recommend the use of PRIMER PU 900 for applications on porous surfaces.
3. Use **BONDFLEX 551 BLACK PRIMER** on glossy nonporous surfaces for best results.
4. Apply with caulking gun.
5. Repair with **BONDFLEX 450 FC MARINE**.
6. Finish with soapy water before skin formation.
7. Cured material may be painted with most paints. When painting with alkyd based paints, a suitability test is mandatory.

A suitability test is recommended.

Not recommended applications: PVC, Plexiglass, Polycarbonate sheets and glazing applications.

JOINT SIZE

Minimum thickness: 2mm (bonding)
5mm (joints)

Maximum thickness: 10mm (bonding)
30mm (joints)

Minimum Depth: 5mm (joints)

Recommendation: joints ≤ 12mm depth = width
joints > 12mm 2 X depth = width

CLEANING

Clean all equipment with white spirit immediately after use.

TECHNICAL CHARACTERISTICS

Base: Polyurethane

Color: White, black, other upon request

Consistency: Paste

Curing System: Moisture Cure

Skin formation (20°C/ 65% R.H.): 60min

Curing Rate (20°C/ 65% R.H.): 4mm/24h

Hardness (DIN 53505): 45 ± 5 Shore A

Specific gravity (DIN 53479): 1,30 gr/ml

Temperature Resistance: -40°C to +90°C

Elastic Recovery (ISO 7389): >80%

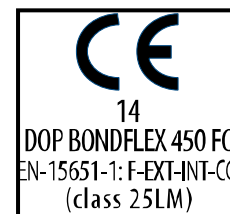
Maximum allowed Distortion: 20%

Elasticity Modulus 100% (DIN 53504): 0,80 N/mm²

Maximum Tension (DIN 53504): 1,70 N/mm²

Elongation at Break (DIN 53504): 700%

Application temperature: +5°C - +35°C



STORAGE

In a cool and dry place at temperatures between +5°C - +25°C

SHELF LIFE

18 months in unopened packaging in the above mentioned storage conditions

PACKAGING

Tubes 80ml

Cartridges 310ml

Sausages 600ml

PACKAGING	CODE	BARCODE
80ml white	4228	5204094042280
310ml white	04260	5204094042600
600ml white	04261	5204094042617
80ml black	4264	5204094042648
310ml black	4262	5204094042624
600ml black	04263	5204094042631

HEALTH AND SAFETY INFORMATION

Consult recent Safety Data Sheet before application.

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The directives contained in this technical data sheet are the result of our long experience from real life applications and the research testing of our research and development laboratory and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications, which are beyond our control, we cannot accept any responsibility for the results obtained. In every case it is recommended to carry out preliminary experiments. We are liable only for our products for being free from faults and of consistent quality. Users are responsible for complying with local legislation and for obtaining any required approvals or authorizations. The present edition of this technical datasheet automatically cancels any previous ones concerning the same product.



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