



LE-SAFE

**NO ADHESIVE. NO RESIDUE.
DESIGNED FOR CRITICAL SERVICE.**

Proven in demanding industrial applications.
Essential in oxygen, hydrogen and cryogenic environments.

**THE SMART
GASKETEERS**

IDT-GASKETS.COM



WHEN ADHESIVES BECOME A RISK

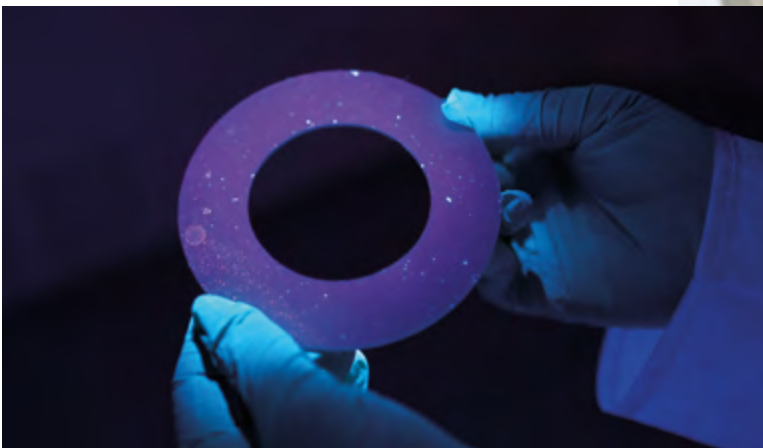
In some applications, adhesives are more than a manufacturing aid. They pose a real risk. At low temperatures they can become brittle. At elevated temperatures they can decompose. In oxygen service, organic residues can become hazardous.

WHY LE-SAFE OUTPERFORMS CONVENTIONAL DESIGNS

In LE-SAFE designs, graphite layers are joined to the metallic core without adhesive. The connection is achieved mechanically. Sealing performance matches conventional designs—without the risks they carry.

OPERATIONAL BENEFITS

- No adhesive-related ageing
- No adhesive residues in the system
- Reduced contamination risk
- Suitable for cryogenic service
- Suitable for oxygen and hydrogen applications



LE-SAFE

Mechanical bonding ✓

No adhesive, no ageing ✓

Reduced contamination risk ✓

PROPERTIES

Adhesive-free mechanical bonding

No residues, no contamination risk

Suitable for cryogenic applications

Qualified for O₂ and H₂ service

PFAS-free

APPROVALS & COMPLIANCE

Fire Safe · API 6FB

TA Luft compliant · DIN EN 13555

Hydrogen ready · DIN EN 13555 for H₂

FDA & EC 1935/2004 compliant

BAM-tested graphite available

LE-SAFE SEALING SOLUTIONS

When contamination, ageing or residues cannot be tolerated.



KAMMPROFILE GASKETS

For applications with high seating stress and low leakage requirements.

- Mechanically joined graphite and grooved metallic core
- Suitable for high operating pressures
- Available with or without centring ring



CORRUGATED METAL GASKETS

For applications requiring good adaptability and reliable sealing at lower seating stress.

- Mechanically joined graphite and corrugated metallic ring
- Good recovery and compensation behaviour
- Particularly suitable for existing equipment



LAMINATED SEALS

For triple-offset valves and other critical valve applications.

- Sandwich structure with graphite and metallic layers
- No adhesive, no delamination due to adhesive ageing
- Suitable from cryogenic to high-temperature service

OPERATING RANGE RANGE

Temperature: -269 °C to +550 °C

Pressure: up to 500 bar

Depending on design and application.

O₂-CLEAN

LE-SAFE O₂-clean products are manufactured in an in-house cleanroom to DIN EN ISO 14644, Class 7. BAM-tested expanded pure graphite is available for all O₂-clean variants.

BAM does not recommend zircon alloys, titanium alloys [incl. 1.4571 / 1.4541] or materials with more than 2.5 % aluminium for oxygen service. IDT stocks qualified alternatives including 1.4401, 1.4404 and 1.4828.



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