Technical News



When designing electronic enclosures, choosing the right gasket or sealing material is vital to prevent water, dust, and moisture ingress. This is where UL 157 and UL 50E standards are important.

We are pleased to announce that a range of our kSil[®] silicone sponge materials has now obtained UL 157 and UL 50E ratings, ensuring superior sealing performance, durability, and safety across multiple applications and sectors.

What is UL 157?

UL 157 is an industry-recognised standard established by Underwriters Laboratories (UL) for gaskets and seals.

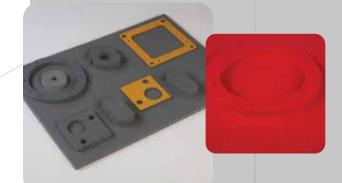
Why is UL 157 Certification Important?

UL 157 ratings provide a comprehensive profile of a material's performance characteristics, helping engineers and designers make informed decisions during application development.

Gaskets and seals play a vital role in protecting against the ingress of dust, liquids, gases, and other environmental contaminants.

UL 157 certification offers assurance that materials used in these critical applications meet high-quality performance standards, delivering:

- Regulatory compliance with industry safety standards
- Predictable and consistent material performance
- Enhanced sealing performance through better application design





What is UL 50E?

UL 50E is a critical safety standard that evaluates the environmental performance of gaskets and sealing materials used in electrical enclosures and outdoor applications.

This certification confirms that materials can withstand exposure to water, dust, extreme temperatures, and other harsh conditions.

Why is UL 50E Certification Important?

For manufacturers producing outdoor electrical enclosures, industrial equipment, and weatherproof sealing solutions, UL 50E-certified materials ensure:

- Protection against environmental hazards such as moisture, dust, and extreme weather
- Compliance with regulatory standards for electrical and industrial enclosures
- Longevity and durability for extended material performance



The information contained in this Technical News is intended to assist you in designing with Silicone Engineering Silicones. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose. The user is responsible for determining the suitability for Silicone Engineering Silicones for each application.

Key Benefits of Our UL-Certified Silicone Materials

- **Industry Compliance:** UL-certified materials provide assurance of safety and performance in regulated applications.
- Versatile Applications: Suitable for gaskets, seals, enclosures, and industrial equipment exposed to demanding environments.
- **Reliability & Durability:** Engineered for long-term resilience, maintaining flexibility, compression, and resistance over time.
- Customisable Solutions: Available in a range of grades, thicknesses, and densities to meet diverse industry needs.



What Silicone Grades Are Listed?

To help customers choose the right material for their application, the following kSil[®] silicone sponge grades are now listed under UL 157 and UL 50E for **General and Seals (JMLU2)** category:

General Purpose Grades (GP)

kSil [®] GP 200
kSil [®] GP 250
kSil [®] GP 350
kSil [®] GP 400
kSil [®] GP 450
kSil [®] GP 530

UL 94 V-0 Rated Grades

kSil® V-0 Soft NG kSil® V-0 Medium NG kSil® V-0 Medium Firm NG kSil® V-0 Firm NG

USA Grades

kSil®US 350



Our listed silicone sponge grades are now UL 157 and UL 50E certified under the General Sealing Materials (JMLU2) category, ensuring their suitability for a broad range of gasket, sealing, and enclosure protection applications. UL File No: MH67030 – Our UL-certified products are officially listed, verifying compliance, reliability, and adherence to industry standards.