



Overview

WICSilicone Transparent Silicone offers outstanding clarity and performance. Designed for industries where visibility and aesthetics are crucial, this silicone rubber maintains its transparency even after prolonged use, while delivering the flexibility, durability, and resistance expected from high-quality silicone.

Batch-tested	ISO 9001
ASTM / ISO Verified	
RoHS / REACH Compliant	
Fully traceable	ISO 10993-4
ISO 10993-10	ISO 10993-5

Technical Specifications

Property	TS-80	TS-70	TS-60	TS-50	Test Method
Hardness (Shore A)	80	70	60	50	DIN 53 505
Tensile Strength (MPa)	9.93	7	8.79	5.94	DIN 53 504
Elongation at Break	555%	372%	607%	850%	ASTM-D 624 die B
Tear Strength (N/mm)	35.53	34.89	33.2	41	DIN 53 504
Test Condition C°/min	130/4	130/4	130/4	130/4	
Selica Based	Fumed	Fumed	Fumed	Fumed	
Curing Agent	PTC	PTC	PTC	PTC	
Rebound Resilience (%)	40				DIN 53 512
Specific Gravity (cm ³)	1/24				
Compression Set	2.5%				DIN 53 517
Temperature Range	-50°C to +250°C				
Appearance	Transparent				



Features & Benefits

High Optical Clarity & UV Stability

Exceptional transparency with long-term UV stability, maintaining visual clarity over time.

Medical & Food-Contact Safe

FDA-compliant, non-toxic, and suitable for medical, food, and baby-care contact applications.

Thermal & Chemical Resistance

Resistant to heat, oxidation, and a wide range of chemicals for demanding environments.

Long-Term Transparency & Durability

Maintains optical clarity and mechanical performance throughout long-term use.

Hypoallergenic & Additive-Free

Non-toxic, hypoallergenic formulation suitable for sensitive and skin-contact applications.

Custom Clarity & Color Options

Custom formulations available, including controlled transparency and color options.

Compliance & Quality

- **ISO 9001:** Quality Management
- **ISO 10993-4:** Tests for blood-material interactions.
- **ISO 10993-10:** Evaluation for skin irritation and sensitization.
- **ISO 10993-5:** In vitro cytotoxicity testing for medical devices.
- Batch-tested for strength & durability
- Fully traceable batch documentation
- ASTM / ISO standards verified
- **RoHS / REACH compliant**



Typical Applications

WICSilicone Transparent Silicone is engineered for industries where clarity and aesthetics are key without compromising durability. Applications include:

Medical Applications

Transparent tubing, seals, and molded parts requiring visibility and biocompatibility.

Food & Beverage Processing

Sanitary molds, hoses, and nozzles for hygienic food-contact environments.

Pharmaceutical & Laboratory Use

Clear tubing and connectors for fluid handling, analysis, and controlled processes.

Optical & Lighting Components

Lenses, diffusers, and protective covers requiring high light transmission.

Electronics & Sensors

Keypads, gaskets, and sensor domes with sealing and optical clarity.

Industrial & Technical Components

Clear seals and molded parts for monitoring flow, alignment, or visual inspection.

Processing & Handling

- Suitable for **extrusion, injection molding, and compression molding**
- Processing temperature: **110–200 °C** (depending on grade).
- Ensure clean contact surfaces; pre-drying usually unnecessary.
- Compatible with platinum- and peroxide-cure systems.
- Retains optical clarity after curing and post-curing
- Recommended **post-cure: 200 °C for 4 hours** to maximize optical stability



Packaging & Storage

- Supplied in **vacuum-sealed 20 kg cartons** or custom packaging.
- Store in a **cool, dry place below 30 °C**, away from sunlight.
- Keep containers tightly closed to prevent contamination.
- Shelf life: **12 months** under recommended conditions.
- Allow material to reach room temperature before use.

The information contained herein is believed to be accurate. Users should verify the suitability of the product for their application. Wire Iran is not responsible for improper use.