

# BENEFITS OF SILICONE TUBING

**SHENZHEN TENCHY SILICONE AND RUBBER CO., LTD**



## TEMPERATURE RESISTANCE

Silicone tubing can withstand a wide range of temperatures, typically from  $-60^{\circ}\text{C}$  to  $200^{\circ}\text{C}$  ( $-76^{\circ}\text{F}$  to  $392^{\circ}\text{F}$ ). This makes it suitable for applications that involve extreme temperatures, both hot and cold.

## CHEMICAL RESISTANCE

Silicone is resistant to many chemicals, solvents, and environmental elements, including ozone and ultraviolet (UV) radiation. This makes silicone tubing durable and reliable in harsh environments where other materials might degrade.

## FLEXIBILITY AND DURABILITY

Silicone tubing remains flexible over its entire temperature range and does not become brittle with age. Its durability ensures a long service life even under repeated use and mechanical stress.

## BIOCOMPATIBILITY

Silicone is biocompatible and non-toxic, making it an excellent choice for medical and pharmaceutical applications. It is often used for medical devices, catheters, and other applications where it will be in contact with the human body.

## ODORLESS AND TASTELESS

Silicone does not impart any taste or odor to fluids passing through it, making it ideal for food and beverage applications. This ensures that the quality of the product remains unaltered.

## STERILIZABILITY

Silicone tubing can be easily sterilized by various methods, including autoclaving, gamma radiation, and ethylene oxide (EtO) gas. This is crucial for medical and laboratory applications where hygiene is paramount.

[WWW.TENCHY.CN/SILICONE-TUBING](http://WWW.TENCHY.CN/SILICONE-TUBING)

Silicone tubing offers a variety of benefits that make it a popular choice in many industries, including medical, food and beverage, automotive, and industrial applications.

Here are some of the key benefits of **silicone tubing**:

## 1. Temperature Resistance:

Silicone tubing can withstand a wide range of temperatures, typically from -60°C to 200°C (-76°F to 392°F). This makes it suitable for applications that involve extreme temperatures, both hot and cold.

## 2. Chemical Resistance:

Silicone is resistant to many chemicals, solvents, and environmental elements, including ozone and ultraviolet (UV) radiation. This makes silicone tubing durable and reliable in harsh environments where other materials might degrade.

## 3. Flexibility and Durability:

Silicone tubing remains flexible over its entire temperature range and does not become brittle with age. Its durability ensures a long service life even under repeated use and mechanical stress.

## 4. Biocompatibility:

Silicone is biocompatible and non-toxic, making it an excellent choice for medical and pharmaceutical applications. It is often used for medical devices, catheters, and other applications where it will be in contact with the human body.

## 5. Odorless and Tasteless:

Silicone does not impart any taste or odor to fluids passing through it, making it ideal for food and beverage applications. This ensures that the quality of the product remains unaltered.

## 6. Sterilizability:

Silicone tubing can be easily sterilized by various methods, including autoclaving, gamma radiation, and ethylene oxide (EtO) gas. This is crucial for medical and laboratory applications where hygiene is paramount.

## 7. Low Toxicity and Hypoallergenic Properties:

The low toxicity and hypoallergenic properties of silicone make it suitable for applications involving sensitive individuals or sterile environments.

## 8. Electrical Insulation:

Silicone is a good insulator, which makes silicone tubing suitable for applications where electrical insulation is required.

## 9. Transparency:

Clear silicone tubing is available, allowing for visual monitoring of the fluid flow. This is particularly useful in laboratory and medical applications.

## 10. Easy to Clean:

Silicone tubing is smooth and non-stick, which makes it easy to clean and maintain. This is beneficial in applications where hygiene is critical.

For more information about Silicone Tubing, visit [www.tenchy.cn/silicone-tubing](http://www.tenchy.cn/silicone-tubing) or call us now **+86 18129801081**