# **Sani \* Tech**<sup>\*\*</sup> Silicone Stoppers



# Sani-Tech<sup>®</sup> Silicone Stoppers

Sani-Tech<sup>®</sup> ultra-pure, platinum-cured silicone stoppers outperform standard neoprene and rubber stoppers in critical process and laboratory applications in terms of lifeexpectancy, consistency, and purity. Sani-Tech<sup>®</sup> silicone stoppers are fully autoclavable and sterilizable and will not crack, cause spallation, or release particulates that could cause process contamination or lost product.

Sani-Tech<sup>®</sup> silicone stoppers can be supplied with cored holes for use with specially designed dip tubes or vent configurations. Custom identification markings can also be utilized to help differentiate supply lines.

# **Characteristics**

The manufacturing process is carefully controlled from receiving through production and inspection and lot traceability is readily accessible in all stages through batch number assignments.

Saint-Gobain Performance Plastics ISO 9001 manufacturing facilities have the ability to create a wide variety of customized silicone stoppers including color coding and coring options to fit the demanding applications of the pharmaceutical, biotechnology, and laboratory environments.

# **Biocompatibility**

Sani-Tech<sup>\*</sup> ultra-pure silicone stoppers are manufactured from a biopharmaceuticalgrade of silicone materials and are fully characterized from a biological, chemical, and physical standpoint. Sani-Tech<sup>\*</sup>stoppers are tested to specifications including USP Class VI and FDA 177.2600 criteria. Sani-Tech<sup>\*</sup> ultra-pure silicone stoppers have a masterfile with the U.S Food and Drug Administration.

#### **BIOPHARMACEUTICAL PRODUCTS**

Ultra-Pure Platinum-Cured Silicone Stoppers

# Features/Benefits

- Ultra-pure Biopharmaceutical-Grade Silicone
- Unsurpassed Surface Smoothness
- Resists Cracking and Spallation
- No Particle Migration
- Fully Autoclavable and Sterilizable
- Imparts No Taste or Odors
- Biologically safe
- Custom Identification and Color Options

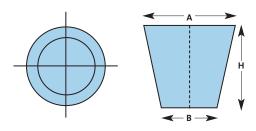
# **Typical Applications**

- Carboys and Vessels
- Solution and Media Bottles
- Process and Storage Procedures
- Laboratory Apparatus



SAINT-GOBAIN PERFORMANCE PLASTICS

# Sani-Tech<sup>®</sup> Silicone Stoppers Selection Guide



| Part<br>Number | Size | A<br>Inches (mm) | B<br>Inches (mm) | H<br>Inches (mm) | Volume<br>Inches' (cm²) | Weight<br>LB (G) |
|----------------|------|------------------|------------------|------------------|-------------------------|------------------|
| 4120-1000      | 000  | 0.528 (13.4)     | 0.350 (8.9)      | 0.830 (21.1)     | 0.127 (2.08)            | 0.005 (2.27)     |
| 4120-1100      | 00   | 0.593 (15.1)     | 0.421 (10.7)     | 0.980 (24.9)     | O.195 (3.20)            | 0.008 (3.63)     |
| 4120-1110      | 0    | 0.665 (16.9)     | 0.518 (13.2)     | 0.981 (24.9)     | 0.272 (4.46)            | 0.012 (5.44)     |
| 4120-0001      | 1    | 0.776 (19.7)     | 0.587 (14.9)     | 0.970 (24.6)     | 0.342 (5.60)            | 0.015 (6.8)      |
| 4120-0002      | 2    | 0.773 (19.6)     | 0.637 (16.2)     | 0.989 (25.1)     | 0.393 (6.44)            | 0.017 (7.71)     |
| 4120-0003      | 3    | 0.950 (24.1)     | 0.725 (18.4)     | 0.982 (24.9)     | O.544 (8.91)            | 0.023 (10.43)    |
| 4120-0004      | 4    | 1.029 (26.1)     | 0.779 (19.8)     | 0.975 (24.7)     | O.628 (10.29)           | 0.026 (11.79)    |
| 4120-0005      | 5    | 1.051 (26.7)     | 0.890 (22.6)     | 0.968 (24.6)     | 0.744 (12.19)           | 0.031 (14.06)    |
| 4120-0006      | 6    | 1.256 (31.9)     | 1.041 (26.4)     | 0.915 (23.2)     | 0.947 (15.52)           | 0.040 (18.14)    |
| 4120-0007      | 7    | 1.440 (36.6)     | 1.115 (28.3)     | 0.957 (24.3)     | 1.233 (20.2)            | 0.054 (24.49)    |
| 4120-0008      | 8    | 1.611 (41.0)     | 1.305 (33.2)     | 0.991 (25.2)     | 1.664 (27.3)            | 0.073 (33.11)    |
| 4120-0009      | 9    | 1.775 (45.1)     | 1.474 (37.4)     | 0.987 (25.1)     | 2.052 (33.63)           | 0.086 (39.01)    |
| 4120-0010      | 10   | 1.973 (50.1)     | 1.669 (42.4)     | 0.935 (23.7)     | 2.425 (39.74)           | 0.102 (26.27)    |
| 4120-0011      | 11   | 2.187 (55.5)     | 1.913 (48.6)     | 0.941 (23.9)     | 3.137 (51.41)           | 0.032 (59.88)    |
| 4120-0012      | 12   | 2.508 (63.7)     | 2.134 (54.2)     | 0.965 (24.5)     | 4.253 (69.69)           | 0.188 (85.28)    |
| 4120-0013      | 13   | 2.667 (67.7)     | 2.284 (58.0)     | 1.011 (25.7)     | 4.813 (78.87)           | 0.207 (93.90)    |
| 4120-0014      | 14   | 3.489 (88.6)     | 2.953 (75.0)     | 1.494 (37.9)     | 12.504 (204.90)         | 0.538 (244.04)   |
| 4120-0015      | 15   | 4.053 (102.9)    | 3.260 (82.8)     | 1.505 (38.2)     | 15.866 (260.00)         | 0.682 (309.36)   |
| 4120-0016      | 16   | 4.950 (125.7)    | 3.543 (90.0)     | 2.016 (51.2)     | 29.106 (476.96)         | 1.252 (567.91)   |

<sup>1</sup> All stoppers can be supplied with cored holes for use with dip tubes, vents, etc. <sup>2</sup> Consult factory for available sizes. Certain half and non-standard sizes are available upon request.

# **Sterilization Methods**

- Autoclavable
- Radiation up to 2.5 Mrad (25 Kilogray)
- Gas Ethylene Oxide

# **Typical Physical Properties**

molded ASTM durometer buttons.

| Property                            | ASTM<br>Method | Value or<br>Rating |
|-------------------------------------|----------------|--------------------|
| Durometer Hardness, Shore A, 15 Sec | D2240          | 45                 |
| Tensile Strength, psi (MPa)         | D412           | 1,250              |
| Ultimate Elongation, 100%           | D412           | 650                |
| Tear Resistance, lb-f/inch (kN/m)   | D624           | 230                |
| Specific Gravity                    | D792           | 1.12               |
| Tensile Modulus                     | D412           | 175                |

Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick extruded strip or 0.075" thick molded ASTM plaques or

Sani-Tech® is a registered trademark.

#### BIOPHARMACEUTICAL PRODUCTS Come through clean.<sup>54</sup>

Come throug

Saint-Gobain Performance Plastics 3910 Terry-Diane Street Beaverton, MI 48612 Tel: (888) 387-0067 Tel: (989) 435-9533 Fax: (989) 435-2355





IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics tubing for all intended uses. Laboratory and clinical tests must be conducted in accordance with applicable regulatory requirements in order to determine the safety and effectiveness for use of tubing in any particular application.

For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics Corporation warrants this product to be free from defects in materials and workmanship. Our only obligation will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risk, if any, including the risk of injury, loss or damage, direct or consequential, arising out of the use, misuse, or inability to use, this product. THIS WARRANTY IS IN LIEU OF THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. No deviation is authorized.

Saint-Gobain Performance Plastics Corporation assumes no obligations or liability for any advice furnished by it, or for results obtained with respect to those products. All such advice is given and accepted at the buyer's risk.