DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS
George K. Burgess, Director

CIRCULAR OF THE BUREAU OF STANDARDS, No. 284
[Issued November 18, 1925]

UNITED STATES GOVERNMENT MASTER SPECIFICATION FOR RUBBER BANDS

FEDERAL SPECIFICATIONS BOARD SPECIFICATION No. 64a
[Revised September 16, 1925]

This specification was officially promulgated by the Federal Specifications Board on September 1, 1923, for the use of the departments and independent establishments of the Government in the purchase of rubber bands.

[The latest date on which the technical requirements of this specification shall become mandatory for all departments and independent establishments of the Government is December 16, 1925. They may be put into effect, however, at an earlier date after promulgation.]

CONTENTS

I. Grade .................................................. 1
II. Material and workmanship .................................. 1
III. General requirements ...................................... 2
IV. Detail requirements ...................................... 2
  1. Physical requirements .................................. 2
  2. Chemical requirements .................................. 2
V. Sampling ................................................. 2
VI. Packing and marking ..................................... 3
VII. Additional information .................................. 3
VIII. General specifications .................................. 3

I. GRADE

Rubber bands shall be of a single grade.

II. MATERIAL AND WORKMANSHIP

Bands shall be free from all imperfections and conform to the requirements given in Table 1.
III. GENERAL REQUIREMENTS

Table 1

<table>
<thead>
<tr>
<th>Band number</th>
<th>Number of bands per pound (minimum)</th>
<th>Length ¹</th>
<th>Band number</th>
<th>Number of bands per pound (minimum)</th>
<th>Length ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>10,000</td>
<td>1 ¹/₄</td>
<td>45</td>
<td>250</td>
<td>1 ¹/₄</td>
</tr>
<tr>
<td>8</td>
<td>7,300</td>
<td>7/₈</td>
<td>62</td>
<td>690</td>
<td>2 ¹/₄</td>
</tr>
<tr>
<td>10</td>
<td>5,200</td>
<td>1 ¹/₄</td>
<td>64</td>
<td>425</td>
<td>3 ¹/₂</td>
</tr>
<tr>
<td>12</td>
<td>3,500</td>
<td>2 ¹/₂</td>
<td>82</td>
<td>320</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>3,200</td>
<td>9/₁₀</td>
<td>84</td>
<td>300</td>
<td>2 ¹/₂</td>
</tr>
<tr>
<td>16</td>
<td>2,500</td>
<td>2 ¹/₄</td>
<td>102</td>
<td>210</td>
<td>3 ¹/₄</td>
</tr>
<tr>
<td>18</td>
<td>2,100</td>
<td>3</td>
<td>140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1,600</td>
<td>2</td>
<td>140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>1,200</td>
<td>2 ³/₄</td>
<td>105</td>
<td>72</td>
<td>5</td>
</tr>
<tr>
<td>24</td>
<td>950</td>
<td>3</td>
<td>82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>800</td>
<td>3 ³/₄</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ This represents the inside length when the band is pressed together flat. A tolerance of plus or minus 5 per cent will be permitted on an average of 10 tests.
² Inside diameter.
³ Outside diameter.

IV. DETAIL REQUIREMENTS

1. PHYSICAL REQUIREMENTS.—Bands shall meet the requirements stated in Table 2.

Table 2

<table>
<thead>
<tr>
<th>Band number</th>
<th>45 through 107</th>
<th>6 through 18</th>
<th>30 through 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength, minimum lbs. per sq. in.</td>
<td>1,200</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Tensile strength per band, minimum pounds</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>Ultimate elongation, minimum per cent.</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
</tbody>
</table>

¹ Based on the average of 4 tests.
² Based on the average of 10 tests.

The tensile strength and ultimate elongation of bands after being subjected to an accelerated aging test of 96 hours in dry air at 158 ± 2° F. shall be not less than 60 per cent of the strength and elongation as determined before heating.

2. CHEMICAL REQUIREMENTS.—The bands shall contain not less than 93 per cent, by volume, of the best quality new wild or plantation rubber.

V. SAMPLING

A 1/₄-pound box of each of the sizes purchased shall be submitted with each shipment of 100 pounds or less. Any lot represented by a sample which fails in one or more tests may be retested at the expense of the contractor. For this purpose two additional samples shall be selected. Failure of either in any respect shall be cause for rejection.
VI. PACKING AND MARKING
Bands shall be packed and marked as specified in the proposal.

VII. ADDITIONAL INFORMATION
No details specified.

VIII. GENERAL SPECIFICATIONS
All tests and analyses shall be made in accordance with the methods described in Federal Specifications Board Specification No. 59, General Specifications for Rubber Goods, in effect on date of proposal.