U. S. Gov't Master Specification No. 217

## DEPARTMENT OF COMMERCE

BUREAU OF STANDARDS George K. Burgess, Director

## CIRCULAR OF THE BUREAU OF STANDARDS No. 227

[Issued May 22, 1925]

# UNITED STATES GOVERNMENT MASTER SPECIFICATION FOR RUBBER ICE BAGS

### FEDERAL SPECIFICATIONS BOARD SPECIFICATION No. 217

This specification was officially promulgated by the Federal Specifications Board on November 5, 1924, for the use of the Departments and Independent Establishments of the Government in the purchase of rubber ice bags.

### CONTENTS Page I. Type\_\_\_\_\_ II. Material and workmanship 1 III. General requirements IV. Detail requirements.... 1. Rubber content 2. Dimensions 3. Tensile strength and ultimate elongation\_\_\_\_\_ 4. Resistance to hot water\_\_\_\_\_ 5. Resistance to hot air 6. Inflation\_\_\_\_\_ 2 V. Sampling\_\_\_\_\_ VI. Packing and marking VII. Additional information

# I. TYPE

VIII. General specifications

Ice bags shall be round or oval in shape. The helmet-shaped ice bag is considered in Federal Specifications Board specification No. 216.

# II. MATERIAL AND WORKMANSHIP

The bag shall be made of rubber walls reinforced at seams and throat. The surface shall be free from pits and other imperfections.

# III. GENERAL REQUIREMENTS

The bag shall be so constructed as to close water-tight with a screw cap not less than 2 inches in diameter. The thickness of wall shall be 0.030 inch, with a tolerance of  $\pm 0.005$  inch.

# IV. DETAIL REQUIREMENTS

- 1. Rubber Content.—The rubber compound shall contain at least 65 per cent by volume of best quality new wild or plantation rubber.
- 2. DIMENSIONS.—The round bags shall be not less than 9 inches in diameter and oval bags not less than 7 by 9 inches.
  - 3. Tensile Strength and Ultimate Elongation.—See Table 1.
- 4. RESISTANCE TO HOT WATER.—Samples shall be submerged in boiling water for seven days. Twenty-four hours after removal, the tensile strength and elongation shall be not less than the requirements shown in Table 1.
- 5. RESISTANCE TO HOT AIR.—Samples shall be aged in a drying oven in circulating air at 70° C. for seven days. Twenty-four hours after removal the tensile strength and elongation shall be not less than the requirements shown in Table 1.
- 6. Inflation.—The ice bag when inflated with air at a pressure corresponding to 18 inches of water shall show no leakage nor any indication of weakness.

Table 1.—Tensile strength and ultimate elongation

Sample	Tensile strength, minimum	Ultimate elongation, minimum
As received  After seven days in boiling water  After seven days in dry air at 70° C	Lbs./in.2 1,600 600 800	Per cent 400 350 200

### V. SAMPLING

One bag shall be selected from each 100 delivered for test and analysis.

### VI. PACKING AND MARKING

Each bag shall have the manufacturer's name or trade name vulcanized in raised letters. Packing shall be as called for in the proposal.

### VII. ADDITIONAL INFORMATION

No detailed information.

### VIII. GENERAL SPECIFICATIONS

General Specifications for Rubber Goods, F. S. B. Specification No. 59, in effect on date of issuance of proposal, shall form part of this specification.

ADDITIONAL COPIES

OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
5 CENTS PER COPY

