

29 June 1959

(See section 6)

MILITARY SPECIFICATION

FILTER, GAS AND PARTICULATE, 600 CFM, MLI

1. SCOPE

1.1 This specification covers a gas and particulate filter for use in removing toxic gases and aerosols from the air forced or drawn through the filter.

2. APPLICABLE DOCUMENTS

2.1 Government documents. The following documents, of the issue in effect on date of invitation for bids, form a part of this specification:

SPECIFICATIONS

FEDERAL

- NN-P-530 - Plywood, Flat Panel.
- TT-E-527 - Enamel, Synthetic, Lustreless.
- UU-P-271 - Paper, Wrapping, Waterproofed Kraft.
- PPP-B-621 - Boxes, Wood, Nailed and Lock-Corner.

STANDARDS

MILITARY

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
- MIL-STD-129 - Marking for Shipment and Storage.

FSC 4240

DRAWINGS

CHEMICAL CORPS

B5-19-2023 - Filter, Gas and Particulate, 600 CFM, M4 - Bill of Material.

(Copies of specifications, standards, drawings and publications required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

3. REQUIREMENTS

3.1 Materials and components.

3.1.1 Materials. All materials cited on Drawing B5-19-2023 or on the subsidiary drawings shall conform to the specifications listed thereon or to the specific characteristics set forth on the drawings.

3.1.2 Components. All components of the item shall conform to the specifications and drawings listed on Drawing B5-19-2023 and subsidiary drawings.

3.2 Manufacture and assembly. The filter shall be manufactured, assembled and marked as shown on Drawing B5-19-2024 and subsidiary drawings, which are listed on Drawing B5-19-2023.

3.3 Workmanship. The filter shall be free from contamination (foreign matter), defects or damage that might impair its use.

4. QUALITY ASSURANCE PROVISIONS

4.1 Supplier's responsibility. Unless otherwise specified herein, the supplier is responsible for the performance of all inspection requirements prior to submission for Government inspection and acceptance. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. Inspection records of the examination and tests shall be kept complete and available to the Government as specified in the contract or order.

4.2 Objective evidence. The supplier shall present objective evidence as required by the Government representative that all materials and components are in accordance with 3.1 and section 5 (see 6.3).

4.3 Alternate inspection (including testing) procedures. The supplier may utilize any alternate inspection procedures which will assure equal or better quality by submitting a written proposal with justification and obtaining written approval from the Government prior to its institution. In case of dispute, the procedures of this specification will govern.

4.4 Inspection provisions.

4.4.1 Lotting. A lot shall consist of the filters produced by one manufacturer from the same materials and under essentially the same manufacturing conditions. However, not more than one lot of C22 600 cubic feet per minute (c.f.m.), gas filters and one lot of C18 600 c.f.m., particulate filters shall be represented in any one lot of M4 filters.

4.4.2 Sampling. Sampling for nondestructive inspection shall be conducted in accordance with Standard MIL-STD-105. The level and degree of inspection shall be specified in the contract.

4.4.3 Nondestructive examination. The regular production lot shall be inspected in accordance with the classification of defects and Standard MIL-STD-105.

4.4.4 Classification of defects.

4.4.4.1 Filter, gas and particulate, 600 c.f.m., M4 - assembly.
(Dwg. D5-19-2024)

Categories and defects

Major AQL 1.0 percent defective

1. Component missing or incorrectly assembled.
2. Damage affecting functioning.
3. Adhesive material incorrectly applied
4. Marking incorrect

Minor AQL 2.5 percent defective

51. Contamination
52. Coating missing, inadequate or incorrect
53. Marking missing or illegible

4.4.4.2 Preparation for delivery. (section 5)Categories and defects.Major

AQL 4.0 percent defective

1. Inlet and outlet openings of the filter not covered as specified
2. Wood filler strips inadequate to make a tight pack where required
3. Class and style of box not as specified
4. Liner missing or incorrectly applied
5. Closure of box incorrect
6. Skids not as specified
7. Box damaged
8. Strapping loose or missing
9. Marking incorrect, missing or illegible

Minor

AQL 6.5 percent defective

51. Strapping material not as specified

5. PREPARATION FOR DELIVERY.

5.1 Packing.

5.1.1 Level A. The inlet and outlet openings of the filter shall be covered with fitted 25-1/2-inch square by 1/4-inch thick exterior grade A-B, flat panel Douglas fir plywood, conforming to Specification NN-P-530, nailed in place. The plywood coverings shall be coated with synthetic lustraloss enamel, color green, number 34087, conforming to Specification TT-E-527. The filter shall then be packed in a class 2, style 2 or 2-1/2 nailed wood box conforming to Specification PPP-B-621. The interior sides, ends and top of the box shall be lined with type E-1 or E-2 waterproof barrier material conforming to Specification UU-P-271. To make a tight pack, wood filler strips shall be placed on the inside of the box between the sides, ends, top, and bottom of the box and the item as required. The box shall be closed in conformance with Specification PPP-B-621, with strapping to be in accordance with the appendix requirements thereto. Galvanized strapping shall be used. In addition, the box shall be modified by the addition of nominal 2 by 4 inch wood skids, conforming to the requirements for lumber as shown in the box specification, placed flatwise across the width of the box. The skids shall be positioned in such manner to provide for box stability and convenience of handling by fork lift trucks. The ends of the skids shall fit flush with the outside faces of the box, and the lower end edges of the skids shall be beveled at 45 degrees to the full depth of the skid.

5.1.2 Level B. Not applicable.

5.1.3 Level C. The filter shall be packed as specified in 5.1.1 except that a class 1, style 2 or 2-1/2 nailed wood box, conforming to Specification PPP-B-621, and coated finished strapping shall be used.

5.2 Marking. In addition to any special marking required by the contract or order, all shipping containers shall be marked in accordance with Standard MIL-STD-129.

6. NOTES

6.1 Intended use. The gas and particulate filter covered by this specification is a component of Filter Unit, Gas and Particulate, 600 CFM, M9, which is used for protecting fixed installations against toxic gases and aerosols.

6.2 Ordering data. Procurement documents should specify:

- a. The title, number, and date of this specification.
- b. The level of packing required (see section 5).

6.3 Objective evidence. Provisions for objective evidence and inspection records, and maintenance of inspection records will be specified by the procuring activity.

6.4 Pilot lot. A pilot lot may be required to evaluate the supplier's production and quality control systems. The contracting officer will specify whether a pilot lot is required and applicable pilot lot acceptance criteria.

6.5 Supersession data. This specification supersedes Chemical Corps Purchase Description 197-54-566A, dated 19 November 1958.

Notice. When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Custodian:

Army - Chemical Corps

Preparing activity:

Army - Chemical Corps