[INCH-POUND] **A-A-3081** <u>July 1, 1997</u> SUPERSEDES T-M-561G February 11, 1991

#### COMMERCIAL ITEM DESCRIPTION

# MOPHEAD, WET (COTTON-SYNTHETIC AND SYNTHETIC)

The General Services Administration has authorized the use of this commercial item description by all Federal agencies.

1. SCOPE. This commercial item covers wet use floor cleaning mopheads composed of cotton and synthetic yarns for the mopping of floors using water and commercial cleaners and disinfectants.

2. CLASSIFICATION. Mopheads shall be the type, style (if applicable), and size specified:

Type I - Cut ends. Style 1 - Untaped, 8 ±2 ply yarn. Style 2 - Taped, 4 ply minimum yarn. Style 3 - Untaped, 4 ply minimum yarn Type II - Looped ends.

Size A - 12 oz (0.34 kg) each, 9 lbs/dz (4.1 kg/dz)
Size B - 16 oz (0.45 kg) each, 12 lbs/dz (5.4 kg/dz)
Size C - 20 oz (0.57 kg) each, 15 lbs/dz (6.8 kg/dz)
Size D - 22 oz (0.62 kg) each, 16-1/2 lbs/dz (7.5 kg/dz)
Size E - 24 oz (0.68 kg) each, 18 lbs/dz (8.2 kg/dz)
Size F - 27 oz (0.77 kg) each, 20 lbs/dz (9.1 kg/dz)
Size G - 32 oz (0.91 kg) each, 24 lbs/dz (10.9 kg/dz)

3. SALIENT CHARACTERISTICS

3.1 <u>Materials</u>.

3.1.1 <u>Yarns</u>.

3.1.1.1 <u>Type I</u>. The yarns of the type I mopheads shall be cotton or cotton blended with rayon, polyester, nylon, acrylic, or a combination of these fibers when tested in accordance with AATCC Test Method 20. The blended yarns shall be of an intimate fiber blend with a cotton content of not less than 30 percent by weight when tested in accordance with AATCC Test Method 20A. Alternate methods to verify these properties are permitted provided they are accurate and repeatable, and are in current industrial use. The yarns shall be free of trash and foreign material, shall have cut ends, and shall meet the requirements as specified in table I when tested in accordance with ASTM D 2256, Option A, Condition 1. Yarn properties may be certified to, based on test reports from the manufacturer.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: General Services Administration, Engineering Group (7FXEE), 819 Taylor Street, Fort Worth, TX 76102 A-A-3081

Table I, Physical requirements of type I yarns.

Characteristics	Style 1	Style 2	Style 3		
Plies	8 (±2)	4 minimum	4 minimum		
Yards/lb (m/kg)	95 (192) minimum	190 (384) minimum	225 (455) minimum		
Breaking strength	45 lbs (200 N) min	25 lbs (111 N) min	18 lbs (80 N) min		

3.1.1.2 <u>Type II</u>. The yarns for the type II mopheads shall be any commercial mophead yarn material that meets the requirements of table III (see 3.3). The yarns shall be the color specified, white and natural shall be considered the same. Yarn properties may be certified to, based on test reports from the manufacturer.

3.1.2 <u>Headbands and tailbands</u>. The headbands for all mopheads, and the tailbands for the type I style 2 and all type II mopheads, shall be a woven tape with the edges woven or selvaged. The tape for the headband shall be a minimum of 1-1/4 inches (3.1 cm) wide, weighing 0.30 ounces per linear yard (9.3 g/m) minimum. The tailband shall be a minimum of 1/2 inches (1.2 cm) wide.

3.1.3 <u>Thread</u>. The thread for all mopheads shall be cotton, nylon, or polyester. The cotton thread shall have a breaking strength of 2.1 pounds (9.3 N) minimum when tested in accordance with ASTM D 204. The nylon or polyester thread shall have a breaking strength of 17 pounds (75.6 N) minimum when tested in accordance with ASTM D 204.

### 3.2 <u>Construction</u>.

3.2.1 <u>Type I, cut end mopheads</u>. The yarns of the type I mopheads shall be laid side by side, with the ends cut to the finished length specified. The mophead shall have a headband at the center of the yarns, the style 2 mopheads shall have a tailband near each of the ends.

3.2.2 <u>Type II, looped ends mophead</u>. The yarns of the type II mopheads shall be looped end to end so that no cut yarns are free or visible. The mophead shall have a headband at the center of the yarns and a tailband near each of the ends.

3.2.3 <u>Headband</u>. All mopheads shall have a one-piece headband completely encircling the middle of the evenly distributed yarns with an overlap of 2 inches (5 cm) minimum. The centerline of the headband shall be within plus or minus 3/4inch (1.9 cm) of the average midpoint (end to end) of the yarns. The finished mophead shall be 6  $\pm 1/2$  inches (15  $\pm 1.2$  cm) wide at the headband prior to laundering. The headband shall be secured with a minimum of 4 rows of stitching with no crossover or runoff. The thread shall be cotton, nylon, or polyester.

3.2.4 <u>Tailband</u>. The type I style 2 mopheads, and all type II mopheads, shall have a tailband at each end of the mophead, superimposed on one side of the mop yarns and wrapped around for a distance of 1 inch (2.5 cm) minimum and secured with bartacks. Alternatively the tape may be completely wrapped around the yarns and the ends bartacked together. The tailband shall be securely stitched to the yarns with not less than two rows of stitching with no crossover or runoff, the thread shall be cotton, nylon, or polyester. The tailband shall maintain the yarns in a side-by-side relationship in a flat layer. Tailbands shall be located at a distance of 1-1/2 to 3 inches (3.8 to 7.6 cm) from each end of the mophead yarns, as measured from the edge of the tailband closest to the end of the yarns.

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3.3 <u>Physical requirements of finished mopheads</u>. The type I mopheads shall conform to the requirements of table II prior to laundering. The type II mopheads shall conform to the requirements of table III; weight, length and width shall be measured prior to laundering.

Table II, Physical requirements of type I mopheads.

01-1						
Size	A	B	С	E	F	G
Weight, oz (kg),	12	16	20	24	27	32
minimum, each	(0.33)	(0.45)	(0.57)	(0.68)	(0.76)	(0.91)
Yarns/mophead min.						
Style 1	90	100	120	130	140	165
Style 2	150	200	225	250	275	300
Style 3	-	-	240	-	-	335
Length of yarns,						
inches (cm) min.						
Style 1	26 (66)	31 (79)	33 (83)	37 (94)	38 (97)	40 (102)
Style 2	26 (66)	31 (79)	35 (89)	37 (94)	39 (99)	42 (107)
Style 3	-	-	35 (89)	-	-	40 (102)

Table III, Physical requirements of type II mopheads.

Size		B		C		D		E	G	
Finished Mopheads										
Weight of each mophead		16		20		22		24	32	
oz (kg) minimum	(0.45)		(0.57)		(0.62)		(0.68)		(0.91)	
Length (loop end to loop										
end) in. $(cm)$ , $\pm 3$ $(\pm 7.6)$	34	(86)	39	(99)	41	(104)	38	(97)	40 (102)	
Width at tailband, in. (cm)										
minimum	13	(33)	13	(33)	18	(46)	18	(46)	22 (56)	
Dimensional stability		(all	size	s) 15%	max:	imum sl	hrin	kage (	3.3.1)	
Total absorption		(a.	ll si	zes)	300%	minimu	m (s	ee 3.3	3.3)	
Water release		(a	ll s	izes)	30% r	ninimur	n (se	ee 3.3	.3)	
Yarns										
Yards per pound (m/kg)			150	(30)	minit	num (As	STM I	D 204)		
Breaking strength	45 lbs (200 N) minimum (ASTM D 204)					04)				

3.3.1 <u>Dimensional stability</u>. As received, 5 mopheads shall be individually weighed and the overall lengths measured. The mopheads shall be washed and dried 5 times using the cotton settings on a domestic washer and a domestic dryer, with the wash water and exhaust temperature at 140°F. After completion of the fifth drying cycle, determine the weight and length and calculate the weight loss and shrinkage as a percentage of their starting values. These 5 samples may be used in the total absorption (3.3.2) and water release tests (3.3.3).

3.3.2 Total absorption (type II). 5 mopheads shall be tested for absorption. Mopheads used in this test shall be laundered in accordance with 3.3.1 prior to testing (use of the mopheads tested in 3.3.1 is acceptable). After weighing, immerse each mophead in tap water at room temperature ( $70 \pm 2^{\circ}F$ ) until saturated. The mophead shall be removed from the water and allowed to drip until individual drops begin to form. The mophead shall be weighed and total the absorption calculated as the percentage of wet weight compared to the dry weight after laundering. The mophead shall then be subjected to the water release test of paragraph 3.3.3.

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3.3.3 <u>Water release (type II)</u>. Mopheads that have been saturated and weighed in accordance with 3.3.2, shall be placed in a downward pressure mop wringer of size appropriate for the mop being tested, and compressed 3 times, 30 seconds each time. Reweigh the mophead and calculate the water released as a percentage of the weight measured at the end of the absorption test.

3.4 <u>Workmanship</u>. The finished mopheads shall be clean, free of trash, neat in construction and appearance. The mopheads shall have no defects which may affect appearance, durability or serviceability.

3.5 <u>Metric products</u>. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, providing they fall within tolerances specified and all other requirements of this document are met.

## 4. REGULATORY REQUIREMENTS

4.1 <u>Regulatory requirements</u>. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

5. QUALITY ASSURANCE PROVISIONS

5.1 <u>Product conformance</u>. The products provided shall meet the salient characteristics of this CID, shall conform to the producer's own drawings, specifications, standards, and quality assurance practices, and shall be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

6. PACKAGING, PACKING AND MARKING

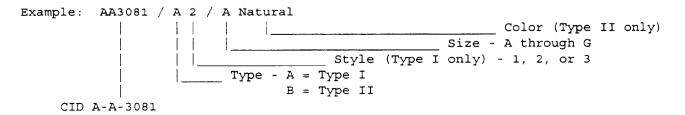
6.1 <u>Packaging, packing and marking</u>. The packaging, packing, and marking shall be as specified in the contract or order.

7. NOTES

7.1 Ordering data. Purchasers should select the preferred options permitted here and include this information in procurement documents:

- (a) Title, number, and date of this CID.
- (b) Type, style (if applicable) and size.
- (c) Packaging, packing, and markings required.

7.2 <u>Part Identification Number (PIN)</u>. This part numbering system is intended for identification and cross-indexing of the item by the government only and does not constitute a requirement for the contractor:



7.3	National	stock	numbers.	The	following	NSN's	utilize	this	document:
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		20110	Size	Color	accument.
NSN	Type S	tyle	(oz)	(Type II)	PN
7920-00-141-5544	I	1	32		 AA3081/A1/G
7920-00-141-5547	I	1	24		AA3081/A1/E
7920-00-141-5548	I	1	27		AA3081/A1/F
7920-00-141-5549	I	1	12		AA3081/A1/A
7920-00-141-5550	I	1	20		AA3081/A1/C
7920-00-171-1148	I	1	16		AA3081/A1/B
7920-00-205-0425	I	3	20		AA3081/A3/C
7920-00-205-0426	I	3	32		AA3081/A3/G
7920-00-926-5493	I	2	16		AA3081/A2/B
7920-00-926-5494	I	2	20		AA3081/A2/C
7920-00-926-5495	I	2	24		AA3081/A2/E
7920-00-926-5496	I	2	27		AA3081/A2/F
7920-00-926-5497	I	2	32		AA3081/A2/G
7920-01-437-8636	II		12	White	AA3081/B/B White
7920-01-437-9805	II		20	White	AA3081/B/C White
7920-01-437-9806	II		22	White	AA3081/B/D White
7920-01-437-9810	II		24	White	AA3081/B/E White
7920-01-437-9811	II		32	White	AA3061/B/G White
7920-01-440-9186	II		12	Blue	AA3061/B/A Blue
7920-01-440-9192	II		16	Blue	AA3061/B/B Blue
7920-01-440-9199	II		20	Blue	AA3061/B/C Blue
7920-01-440-9187	II		22	Blue	AA3061/B/D Blue
7920-01-440-9188	II		24	Blue	AA3061/B/E Blue
7920-01-440-9191	II		16	Green	AA3061/B/B Green
7920-01-440-9194	II		20	Green	AA3061/B/C Green
7920-01-440-9190	II		22	Green	AA3061/B/D Green
7920-01-440-9193	II		24	Green	AA3061/B/E Green
7920-01-440-9197	II		16	Orange	AA3061/B/B Orange
7920-01-440-9196	II		20	Orange	AA3061/B/C Orange
7920-01-440-9195	II		22	Orange	AA3061/B/D Orange
7920-01-440-9198	II		24	Orange	AA3061/B/E Orange

### 7.4 <u>Referenced documents</u>.

AATCC:

Test Method 20 Fiber Analysis, Qualitative Test Method 20A Fiber Analysis, Quantitative

Copies of AATCC (Technical Manual of the American Association of Textile Chemists and Colorists) test methods are available from the American Association of Textile Chemists and Colorists, AATCC, 1 Davis Drive, P.O. Box 12215, Research Triangle Park, NC 27709, (919) 549-8141.

ASTM:

D 204 Standard Methods of Testing Sewing Threads
D 2256 Standard Test Method for Tensile Properties of Yarns by the
Single-Strand Method

Copies of ASTM standards are available from ASTM, 1916 Race Street, Philadelphia, PA 19103.

Preparing Activity GSA-FSS