

METRIC

NOTICE OF  
CHANGEMIL-STD-1246C  
NOTICE 1  
16 May 1994MILITARY STANDARD  
PRODUCT CLEANLINESS LEVELS  
AND  
CONTAMINATION CONTROL PROGRAM

TO ALL HOLDERS OF MIL-STD-1246C:

1. THE FOLLOWING PAGE OF MIL-STD-1246C HAS BEEN CORRECTED AND  
SUPERSEDES THE PAGE LISTED:

NEW PAGE	DATE	SUPERSEDED PAGE	DATE
9	16 May 1994	9	11 April 1994
10	11 April 1994	10	REPRINTED WITHOUT CHANGE

2. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.

3. Holders of MIL-STD-1246C will verify that page changes and additions indicated above have been entered. This notice page will be retained as a check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the military standard is completely revised or canceled.

## Custodians:

Army - MI  
Navy - YD  
Air Force - 99  
DLA - GS

## Preparing activity:

Army - MI  
(Project 3694-0038)

## Review activities:

Army - AV, AT, GL, AL, AR, ME  
Navy - AS, OS, SH  
Air Force - 70, 71, 79, 84  
DLA - ES

AMSC N/A

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FSC 3694

MIL-STD-1246C  
NOTICE 1

TABLE I. Particle cleanliness levels. 1/

Level	Particle Size, $\mu\text{m}$	Count per 1 ft <sup>2</sup>	Count per 0.1 m <sup>2</sup>	Count per liter
1	1	1.0	1.08	10
5	1	2.8	3.02	28
5	2	2.3	2.48	23
5	5	1.0	1.08	10
10	1	8.4	9.07	84
10	2	7.0	7.56	70
10	5	3.0	3.24	30
10	10	1.0	1.08	10
25	2	53	57	530
25	5	23	24.8	230
25	15	3.4	3.67	34
25	25	1.0	1.08	10
50	5	166	179	1660
50	15	25	27.0	250
50	25	7.3	7.88	73
50	50	1.0	1.08	10
100	5	1785	1930	17850
100	15	265	286	2650
100	25	78	84.2	780
100	50	11	11.9	110
100	100	1.0	1.08	10
200	15	4189	4520	41890
200	25	1240	1340	12400
200	50	170	184	1700
200	100	16	17.3	160
200	200	1.0	1.08	10
300	25	7455	8050	74550
300	50	1021	1100	10210
300	100	95	103	950
300	250	2.3	2.48	23
300	300	1.0	1.08	10

## MIL-STD-1246C

## NOTICE 1

TABLE I. Particle cleanliness levels, continued.

Level	Particle Size, $\mu\text{m}$	Count per $1 \text{ ft}^2$	Count per $0.1 \text{ m}^2$	Count per liter
500	50	11817	12800	118170
500	100	1100	1190	11000
500	250	26	28.1	260
500	500	1.0	1.08	10
750	50	95807	105000	958070
750	100	8919	9630	89190
750	250	214	231	2140
750	500	8.1	8.75	81
750	750	1.0	1.08	10
1000	100	42658	46100	426580
1000	250	1022	1100	10220
1000	500	39	42.1	390
1000	750	4.8	5.18	48
1000	1000	1.0	1.08	10

1/ Limits on particle count at indicated particle size for surface or liquid to meet the level of cleanliness. Sampling areas other than  $0.1 \text{ m}^2$  shall be calculated to the basis of  $0.1 \text{ m}^2$ . Areas may be estimated if total area is considered by both parties to be too difficult to measure within two significant figures. This condition shall be noted and low/high ranges shall be used. Parts with a total significant surface area less than  $0.1 \text{ m}^2$  and which have had the entire critical surface area sampled shall be accepted on the basis of actual count.

4.3 Log-log<sup>2</sup> distribution of particles. The log-log<sup>2</sup> distribution of acceptable particle contamination is shown in figure 1.