



International particle count standards NAS 1638 (National Aerospace standard)

The NAS system divides particles in 5 particle size ranges.

The NAS system specifies different counts within each particle range to score a specific class.

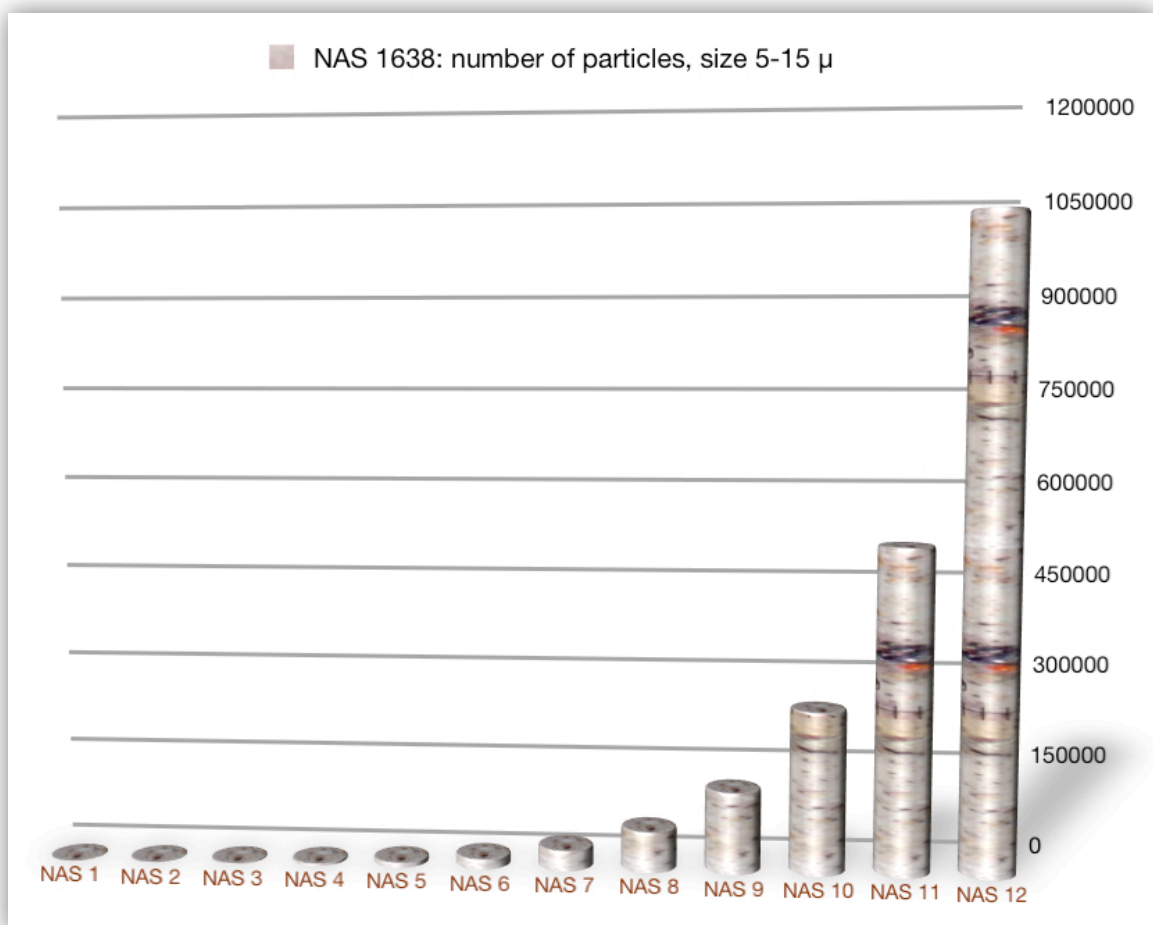
A particle count will show up to have almost the same NAS class rating within the different particle ranges.

Particle Size (μ)	NAS GRADE (n° in 100 ml)											
	1	2	3	4	5	6	7	8	9	10	11	12
5-15 μ	500	1.000	2.000	4.000	8.000	16.000	32.000	64.000	128.000	256.000	512.000	1.024.000
15-25 μ	89	178	356	712	1.425	2.850	5.700	11.400	22.800	45.600	91.000	182.400
25-50 μ	16	32	63	126	253	506	1.012	2.025	4.050	8.100	16.200	32.400
50-100 μ	3	6	11	22	45	90	180	360	720	1.440	2.880	5.760
> 100 μ	1	1	2	4	8	16	32	64	128	256	512	1.024

Class range with Triple R

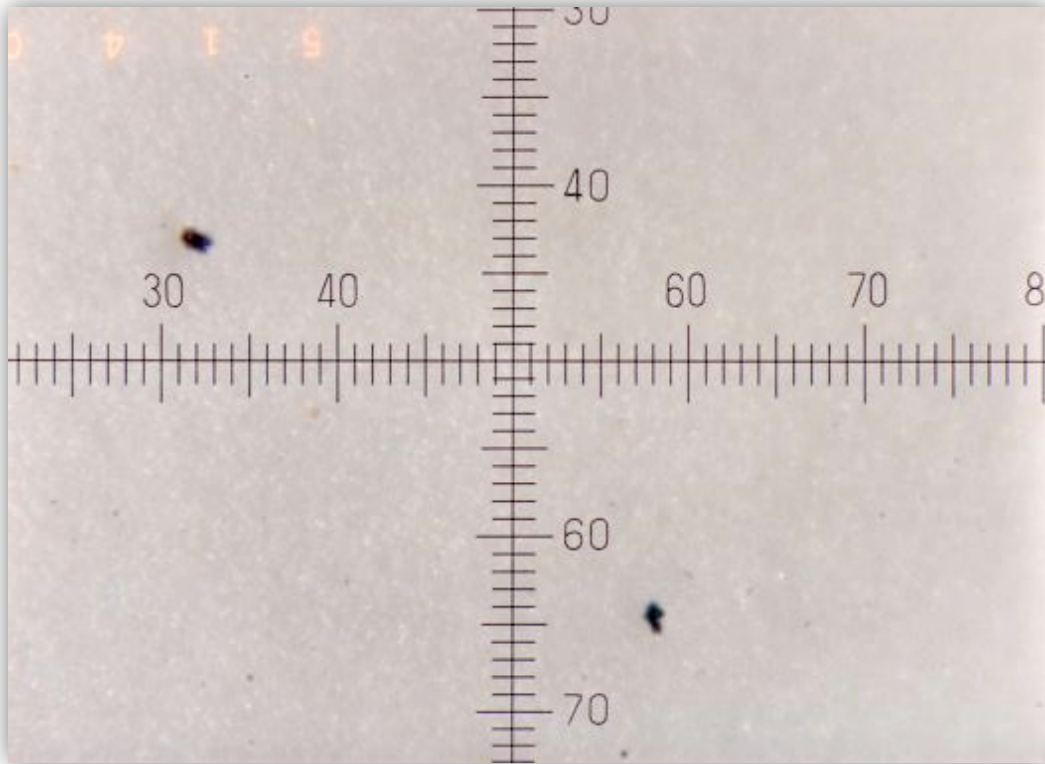
New fresh oil

Each class defines a range of counts within an exponential scale.



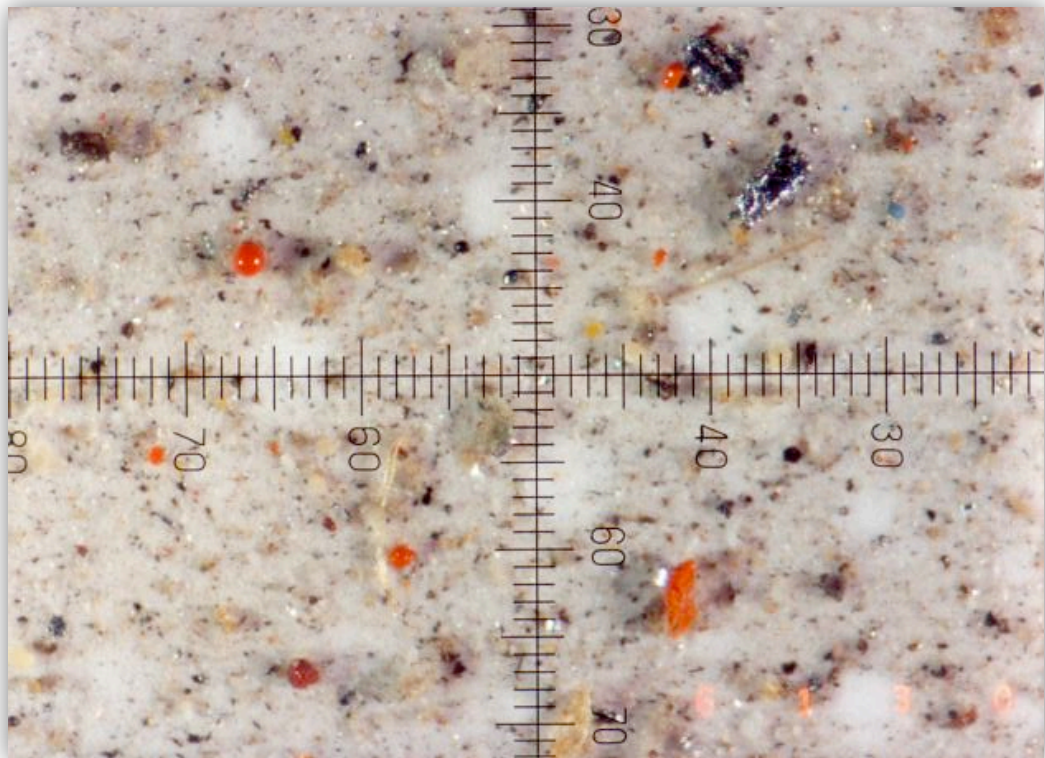
Microscopic enlargement of a Millipore 0,8 μ membrane

NAS 4



1 div = 30 μ

NAS 12



1 div = 15 μ