

**Customer:** MMC Std profiles

**Product:** Electrolytic Manganese

**Customer Code:** MMC006

**Grade:** SP-60+325 mesh

**Agent:** None

**Grade ID:** 60

**Specifications**

Element	Max	Min	Tolerance	Typical	
* S	0.040	-	0.004	-	%
* C	0.015	-	0.0004	-	%
* H	0.015	-	0	-	%
* O	0.40	-	0.04	-	%
* N	0.040	-	0.004	-	%
* Fe	0.010	-	0	0.002	%
Pb	-	-	-	0.001	%
+ Mn	-	99.0	0	99.4	%
Cu	-	-	-	0.0003	%
x Mn(Met)	99.9	99.9	0	99.9	%
P	-	-	-	0.001	%
Si	-	-	-	0.002	%
V	-	-	-	0.0001	%

**Grading Specification**

Aperture	ASTM No	Max	Min	Tolerance
0.3000	+ 50	-	-	-
0.2500	+ 60	0.1	-	0.0
0.1800	+ 80	-	-	-
0.1500	+ 100	-	-	-
0.1060	+ 140	-	-	-
0.0750	+ 200	-	-	-
0.0630	+ 230	-	-	-
0.0450	+ 325	-	85.0	0.0

\* Analysis per consignment.

x Metallic Manganese calculated excluding non-metallic

+ Total Manganese on a total weight basis.

**Packing:**

Bulk bottom discharge bags each 1000kg with glued-in liners on pallets (2 bags per pallet)

**Instructions:**

Gas Test (30min): 0.002% H<sub>2</sub> (Typical)

Product is Selenium free

Packaging options:

500kg Steel drums on pallets

1000kg in bulkbags on pallets

1361kg in bulkbags on pallets

25kg paperbags spiral wrapped on a pallet (1000kg)

25kg paperbags packed in a 2000kg wooden box

22.68kg paperbags spiralwrapped on pallets (1361kg)

**Special Req:**

**This product is manufactured using a selenium free process.**

**Electronic approval of this specification has been obtained from the Chief Chemist, Production Superintendent(s) and Marketing Manager. A hardcopy of this specification is kept in the Marketing files.**