

## **Ferromanganese Powder, Certified Reference Material**

Art. ID IARM-FMnP-20  
Unit 100 g (powder)  
Deliverydetails No Dangerous Good /not restricted

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified Value	Boron (B)	[7440-42-8]	0,0019 ± 0,01	%		
Certified Value	Carbon (C)	[7440-44-0]	1,13 ± 0,006	%		
Certified Value	Cobalt (Co)	[7440-48-4]	0,019 ± 0,01	%		
Certified Value	Chromium (Cr)	[7440-47-3]	0,036 ± 0,0008	%		
Certified Value	Copper (Cu)	[7440-50-8]	0,01 ± 0,004	%		
Certified Value	Iron (Fe)	[7439-89-6]	16,6 ± 0,002	%		
Certified Value	Manganese (Mn)	[7439-96-5]	79,7 ± 0,8	%		
Certified Value	Nitrogen (N)	[7727-37-9]	0,083 ± 0,001	%		
Certified Value	Nickel (Ni)	[7440-02-0]	0,015 ± 0,005	%		
Certified Value	Lead (Pb)	[7439-92-1]	0,08 ± 0,0004	%		
Certified Value	Sulfur (S)	[7704-34-9]	0,008 ± 0,0001	%		
Certified Value	Silicon (Si)	[7440-21-3]	0,42 ± 0,001	%		
Indicative Value	Aluminium (Al)	[7429-90-5]	~400	ppm		
Indicative Value	Arsenic (As)	[7440-38-2]	~40	ppm		
Indicative Value	Bismuth (Bi)	[7440-69-9]	<20	ppm		
Indicative Value	Calcium (Ca)	[7440-70-2]	~1800	ppm		
Indicative Value	Gallium (Ga)	[7440-55-3]	<30	ppm		
Indicative Value	Hydrogen (H)	[1333-74-0]	~140	ppm		
Indicative Value	Hafnium (Hf)	[7440-58-6]	<10	ppm		
Indicative Value	Potassium (K)	[7440-09-7]	<70	ppm		
Indicative Value	Lanthanum (La)	[7439-91-0]	<3	ppm		
Indicative Value	Magnesium (Mg)	[7439-95-4]	~300	ppm		
Indicative Value	Molybdenum (Mo)	[7439-98-7]	~11	ppm		
Indicative Value	Sodium (Na)	[7440-23-5]	<100	ppm		
Indicative Value	Niobium (Nb)	[7440-03-1]	~4	ppm		
Indicative Value	Oxygen (O)	[7782-44-7]	~11000	ppm		
Indicative Value	Lead (Pb)	[7439-92-1]	~20	ppm		
Indicative Value	Antimony (Sb)	[7440-36-0]	~10	ppm		
Indicative Value	Tin (Sn)	[7440-31-5]	~3	ppm		
Indicative Value	Titanium (Ti)	[7440-32-6]	~60	ppm		
Indicative Value	Vanadium (V)	[7440-62-2]	~54	ppm		

Indicative Value	Tungsten (W)	[7440-33-7]	~8	ppm
Indicative Value	Zinc (Zn)	[7440-66-6]	~30	ppm
Indicative Value	Zirconium (Zr)	[7440-67-7]	~2	ppm