

## **Alloy Steel, Chromium Steel, A182 Grade F91 / K90901, chips**

Art. ID IARM-FE91-18-C  
Unit 100 g (chips)  
Deliverydetails No Dangerous Good /not restricted

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified Value	Aluminium (Al)	[7429-90-5]	0,006 ± 0,003	%		
Certified Value	Carbon (C)	[7440-44-0]	0,099 ± 0,003	%		
Certified Value	Cobalt (Co)	[7440-48-4]	0,013 ± 0,001	%		
Certified Value	Chromium (Cr)	[7440-47-3]	8,24 ± 0,09	%		
Certified Value	Copper (Cu)	[7440-50-8]	0,041 ± 0,002	%		
Certified Value	Manganese (Mn)	[7439-96-5]	0,453 ± 0,007	%		
Certified Value	Molybdenum (Mo)	[7439-98-7]	0,94 ± 0,02	%		
Certified Value	Nitrogen (N)	[7727-37-9]	0,046 ± 0,002	%		
Certified Value	Niobium (Nb)	[7440-03-1]	0,07 ± 0,003	%		
Certified Value	Nickel (Ni)	[7440-02-0]	0,187 ± 0,004	%		
Certified Value	Oxygen (O)	[7782-44-7]	0,003 ± 0,001	%		
Certified Value	Phosphorus (P)	[7723-14-0]	0,015 ± 0,001	%		
Certified Value	Sulfur (S)	[7704-34-9]	0,002 ± 0,001	%		
Certified Value	Silicon (Si)	[7440-21-3]	0,27 ± 0,01	%		
Certified Value	Tin (Sn)	[7440-31-5]	0,004 ± 0,001	%		
Certified Value	Titanium (Ti)	[7440-32-6]	0,0021 ± 0,0009	%		
Certified Value	Vanadium (V)	[7440-62-2]	0,198 ± 0,006	%		
Certified Value	Tungsten (W)	[7440-33-7]	0,003 ± 0,002	%		
Indicative Value	Arsenic (As)	[7440-38-2]	<50	ppm		
Indicative Value	Boron (B)	[7440-42-8]	<50	ppm		
Indicative Value	Calcium (Ca)	[7440-70-2]	<50	ppm		
Indicative Value	Hydrogen (H)	[1333-74-0]	<10	ppm		
Indicative Value	Hafnium (Hf)	[7440-58-6]	<10	ppm		
Indicative Value	Magnesium (Mg)	[7439-95-4]	<10	ppm		
Indicative Value	Lead (Pb)	[7439-92-1]	<10	ppm		
Indicative Value	Palladium (Pd)	[7440-05-3]	<10	ppm		
Indicative Value	Antimony (Sb)	[7440-36-0]	<10	ppm		
Indicative Value	Selenium (Se)	[7782-49-2]	<50	ppm		
Indicative Value	Tantalum (Ta)	[7440-25-7]	<70	ppm		
Indicative Value	Yttrium (Y)	[7440-65-5]	<10	ppm		
Indicative Value	Zinc (Zn)	[7440-66-6]	<10	ppm		

Indicative Value	Zirconium (Zr)	[7440-67-7]	<40	ppm
	Aluminium (Al)	[7429-90-5]	~0,006	%
	Carbon (C)	[7440-44-0]	0,099	%
	Cobalt (Co)	[7440-48-4]	0,013	%
	Chromium (Cr)	[7440-47-3]	8,24	%
	Copper (Cu)	[7440-50-8]	0,041	%
	Manganese (Mn)	[7439-96-5]	0,453	%
	Molybdenum (Mo)	[7439-98-7]	0,94	%
	Nitrogen (N)	[7727-37-9]	0,046	%
	Niobium (Nb)	[7440-03-1]	0,07	%
	Nickel (Ni)	[7440-02-0]	0,187	%
	Oxygen (O)	[7782-44-7]	~0,003	%
	Phosphorus (P)	[7723-14-0]	0,015	%
	Sulfur (S)	[7704-34-9]	~0,002	%
	Silicon (Si)	[7440-21-3]	0,27	%
	Tin (Sn)	[7440-31-5]	~0,004	%
	Titanium (Ti)	[7440-32-6]	~0,0021	%
	Vanadium (V)	[7440-62-2]	0,198	%
	Tungsten (W)	[7440-33-7]	~0,003	%