

BRAMMER STANDARD ONLINE CATALOG - COMBUSTION MATERIALS

C, S, O, N IN IRON AND STEEL, CHART 1 of 4

= class, 1 = CRM and 2 = RM analysis in mass % 34, 17025 = ISO

#	Number	Carbon	Sulfur	Oxygen	Nitrogen	Units
1	AR 510-513A	2.41	0.091	.	.	250 g 0.5 g pins
1	JSS 202-2	1.443	.	.	.	150 g chips
1	JSS 202-1	1.386	.	.	.	150 g chips last
1	NH M02	1.34	0.007	.	.	150 g chips
1	NCS NS18016	1.19	0.0080	.	.	100 g chips
1	Y 31916	1.19	0.0080	.	.	100 g chips
2	KMS HCS-001	1.161	0.1318	.	.	100 g chips last
1	ECRM 268-1C	1.134	0.0154	.	2.03	100 g chips
1	NCS NS18015	1.09	0.018	.	.	100 g chips
1	Y 31915	1.09	0.018	.	.	100 g chips
1	DSZU CA02	1.03	0.0021	.	0.0030	200 x 1.05 g balls
1	JSS 208-4	1.017	.	.	.	150 g chips
2	KMS HCS-002	1.013	0.123	.	.	100 g chips
1	JSS 208-3	0.998	.	.	.	150 g chips last
1	DSZU CX010a	0.993	0.0203	.	.	200 g chips
1	AR 889-419J	0.928	0.0020	.	.	454 g 1 g pins
1	NCS NS18014	0.990	0.0041	.	.	100 g chips
1	Y 31914	0.990	0.0041	.	.	100 g chips
2	CZ 2008A	0.977	0.0091	.	0.0066	250 g chips
1	TH 1006-4	0.952	0.0111	.	0.0046	100 g chips last
1	AR 953-421G	0.948	0.0010	.	0.0044	150 g chips
2	SAG 0703	0.924	0.0041	17025	0.0070	100 g chips
1	NCS NS18013	0.890	0.022	.	.	100 g chips
1	Y 31913	0.890	0.022	.	.	100 g chips
1	VS U13/4	0.888	0.0070	.	.	100 g chips
1	AR 885-520Z	0.820	0.0055	.	.	454 g 1 g pins
2	SAG 0704	0.818	0.0040	17025	0.0040	100 g chips
1	NCS NS13026	0.81	.	.	.	100 g chips
1	AR 875-421J	0.786	0.015	.	.	454 g 1 g rings
1	AR 886-319H	0.729	0.022	.	.	454 g 1 g pins
1	TH 1027-2	0.726	0.0092	.	0.003	100 g chips
1	NCS NS13025	0.725	.	.	.	100 g chips
1	IPT 60A	0.715	0.012	.	.	100 g chips
2	SAG 0709	0.704	0.0064	17025	0.0030	100 g chips
1	NCS NS11010	0.703	0.010	.	.	50 g 0.5g balls last
1	ECRM 049-1	0.701	0.0040	.	0.0031	100 g chips
2	CZ 2007A	0.684	0.0106	.	0.0128	250 g chips
1	AR 874-1119A	0.658	0.0108	.	.	454 g 1 g rings
1	NCS NS13008	0.644	0.068	.	.	100 g chips
1	NCS NS18012	0.610	0.0095	.	.	100 g chips
1	Y 31912	0.610	0.0095	.	.	100 g chips
1	ECRM 079-2	0.596	0.192	.	0.0074	100 g chips
1	NCS NS13024	0.59	.	.	.	100 g chips
1	SRM 2160	0.584	0.012	.	.	200 g 1 g pins
2	BS CSN 2-2	0.548	0.028	.	0.076	500 g 1 g pins
1	AR 894-416B	0.544	0.0103	.	.	454 g 1 g pins
1	NCS NS18011	0.543	0.012	.	.	100 g chips
1	Y 31911	0.543	0.012	.	.	100 g chips
1	NCS NS28027	0.523	0.017	.	.	100 g chips
1	NCS NS93011	0.512	0.0095	.	.	100 g chips
1	IPT 59A	0.495	0.018	.	.	100 g chips
1	NCS NS13005	0.485	0.024	.	.	100 g chips
1	NCS NS13023	0.48	.	.	.	100 g chips
1	IARM 259A	0.479	0.0007	0.0014	0.0077	100 g chips
2	BS CSN 2-1	0.476	0.034	.	0.064	270 or 500 g 1 g pins last
1	AR 884-420U	0.472	0.0121	.	.	454 g 1 g pins
1	NCS NS28029	0.465	0.020	.	.	100 g chips
1	NCS NS28005	0.462	0.0096	.	.	100 g chips
2	CZ 2006A	0.461	0.0172	.	0.0066	250 g chips
1	AR 952-1120N	0.455	0.029	.	0.0095	150 g chips
1	NCS NS18010	0.455	0.019	.	.	100 g chips
1	Y 31910	0.455	0.019	.	.	100 g chips
2	DH E2184	0.4433	0.0152	.	.	50 g chips
2	SAG 0707	0.435	0.1965	17025	0.0064	100 g chips
1	AR 956-320P	0.430	0.261	.	0.0069	150 g chips

Number Carbon Sulfur Oxygen Nitrogen Units

C, S, O, N IN IRON AND STEEL, CHART 2 of 4

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#	Number	Carbon	Sulfur	Oxygen	Nitrogen	Units
1	ECRM 058-2C	0.424	0.1712	.	0.0107	100 g chips
1	AR 873-820F	0.423	0.0091	.	.	454 g 1 g rings
1	AR 954-218B	0.417	0.027	.	0.0083	150 g chips
1	NCS NS28004	0.416	0.022	.	.	100 g chips
1	NCS NS18009	0.415	0.020	.	.	100 g chips
1	Y 31909	0.415	0.020	.	.	100 g chips
1	NCS NS11088	0.411	0.0040	.	.	100 g chips
2	DH E2333	0.3876	0.0585	.	.	50 g chips
1	AR 947-620B	0.385	0.104	.	0.0103	150 g chips
1	TH 1013-2	0.384	0.0344	.	0.0142	100 g chips, last
1	NCS NS18008	0.376	0.028	.	.	100 g chips
1	Y 31908	0.376	0.028	.	.	100 g chips
1	NCS NS93012	0.375	0.046	.	.	100 g chips
1	NCS NS13022	0.37	.	.	.	100 g chips
2	CZ 2005A	0.358	0.0250	.	0.0081	250 g chips, last
1	NCS NS93005	0.357	0.018	.	.	100 g chips
2	SAG 0706	0.347	0.0245	17025	0.0098	100 g chips
1	NCS NS28025a	0.330	0.024	.	.	100 g chips
1	NCS NS11003	0.322	0.020	.	.	150 g chips
1	IPT 58A	0.316	0.021	.	.	120 g chips
1	NCS NS18007	0.312	0.026	.	.	100 g chips
1	Y 31907	0.312	0.026	.	.	100 g chips
1	NCS NS93009	0.310	0.031	.	.	100 g chips
1	JSS 252-3	0.302	0.0415	.	.	150 g chips
1	JSS 252-4	0.295	0.0404	.	.	150 g chips
1	NCS NS93004	0.293	0.040	.	.	100 g chips
1	NCS NS18006	0.282	0.033	.	.	100 g chips
1	Y 31906	0.282	0.033	.	.	100 g chips
1	AR 878-417A	0.272	0.0215	.	.	454 g 1 g rings
2	SAG 0708	0.257	0.0014	17025	.	100 g chips
1	NCS NS11011	0.235	0.039	.	.	100 g chips
1	NCS NS93008c	0.233	0.030	.	.	100 g chips
1	VS U19/2	0.233	0.030	.	.	100 g chips
1	AR 883-719C	0.216	0.0183	.	.	454 g 1 g pins
1	NCS NS13021	0.21	.	.	.	100 g chips
1	NCS NS18005	0.204	0.022	.	.	100 g chips
1	Y 31905	0.204	0.022	.	.	100 g chips
1	AR 955-719F	0.201	0.025	.	0.0071	150 g chips
2	DH E2218	0.1989	0.0014	.	0.0155	50 g chips
1	VS 6-2	0.195	0.0250	.	.	100 g chips
1	NCS NS93014	0.190	0.030	.	.	100 g chips
2	DH E2161	0.1843	0.0043	.	0.0186	50 g chips
2	SAG 0705	0.184	0.0020	17025	0.0580	100 g chips
1	VS U15/6	0.182	0.0218	.	.	100 g chips
1	JK 21	0.1741	0.011	.	0.008	150 g chips
1	AR 872-1221T	0.172	0.0082	.	.	454 g 1 g rings
2	DH E21-372	0.1720	0.0011	.	0.0120	50 g chips
2	DH E21-371	0.1712	0.0011	.	0.0119	50 g chips
1	NCS NS18004	0.171	0.0102	.	.	100 g chips
1	Y 31904	0.171	0.0102	.	.	100 g chips
1	AR 951-1220P	0.168	0.019	.	0.0102	150 g chips
2	DH E23-291	0.1668	0.0007	.	0.0050	50 g chips
1	ECRM 077-3	0.1650	0.0162	.	0.00860	100 g chips
1	AR 896-1021N	0.165	0.087	.	.	454 g 1 g pins
2	DH E2172	0.1611	0.0147	.	.	50 g chips
1	NCS NS28021	0.160	0.028	.	.	100 g chips
2	DH E2122	0.1599	0.0016	.	0.0078	50 g chips
1	AR 957-421K	0.157	0.096	.	0.0077	150 g chips
2	SAG 0710	0.155	0.0209	17025	.	100 g chips
2	DH E23-211	0.154	0.0009	.	0.0040	50 g chips
2	DH E2201	0.1492	0.0048	.	.	50 g chips
1	NCS NS93013b	0.146	0.014	.	.	100 g chips
2	DH E2106	0.1406	0.0277	.	0.0063	50 g chips
2	DH E2334	0.135	0.0010	.	0.0147	50 g chips, last of stock
1	AR 888-119E	0.134	0.229	.	.	454 g 1 g pins
2	DH E2175	0.1290	0.0181	.	.	50 g chips
1	AR 960-814B	0.121	0.0221	.	0.036	150 g chips

Number Carbon Sulfur Oxygen Nitrogen Units

C, S, O, N IN IRON AND STEEL, CHART 3 of 4

= class, 1 = CRM and 2 = RM analysis in mass %

#	Number	Carbon	Sulfur	Oxygen	Nitrogen	Units
1	VS U11/5	0.119	0.027	.	.	100 g chips
1	NCS NS11086	0.116	0.0020	.	.	100 g chips
1	NCS NS11087	0.113	0.0023	.	.	100 g chips
1	AR 890-320M	0.110	0.0046	.	.	454 g 1 g pins
2	DH E21-211	0.1080	0.0007	.	0.0102	50 g chips
1	VS U17/4	0.106	0.137	.	.	100 g chips
1	AR 868-818A	0.102	0.0053	.	.	454 g 1 g rings
1	NCS NS13020	0.10	.	.	.	100 g chips
2	DH E21-162	0.0974	0.0104	.	0.0079	50 g chips
2	DH E2111	0.0953	0.0066	.	.	50 g chips last of stock
1	VS 6-1	0.094	0.0205	.	.	100 g chips
1	TH 1041	0.0925	0.0100	.	.	100 g chips
1	NH M01	0.090	0.057	.	.	150 g chips
1	AR 514-518D	0.087	0.335	.	.	250 g 0.5 g pins
1	NCS NS11085	0.087	0.0053	.	.	100 g chips
1	VS S41/5	0.085	0.0069	.	0.142	100 g chips
1	TH 1038	0.0823	0.247	.	.	50 g chips, last
1	NCS NS18003	0.082	0.035	.	.	100 g chips
1	Y 31903	0.082	0.035	.	.	100 g chips
2	DH E23-201	0.0800	0.0027	.	0.0120	50 g chips
2	DH E2317	0.0795	0.0014	.	.	50 g chips
2	DH E2318	0.0793	.	.	.	50 g chips
2	CZ 2004A	0.079	0.0464	.	0.0038	250 g chips, last
1	TH 1042-3	0.079	0.0231	.	0.0091	100 g chips
1	TH 1042-2	0.0778	0.0227	.	0.0087	100 g chips
1	DSZU CX020a	0.076	0.034	.	.	200 g chips
2	BS CSN A	0.068	0.305	.	0.0081	100 g chips
2	CZ 2026A	0.068	0.255	.	.	250 g chips
1	NCS NS11100	0.066	0.0033	.	0.161	50 g chips
1	ECRM 294-1C	0.0657	0.00031	.	0.566	100 g chips
1	AR 511-519A	0.064	0.272	.	.	250 g 0.5 g pins
2	DH E2326	0.0637	0.0013	.	.	50 g chips
2	DH E23-221	0.0622	0.0007	.	0.0031	50 g chips
2	DH E2322	0.0609	0.0009	.	.	50 g chips, last
2	DH E21-961	0.0609	0.0006	.	0.0034	50 g chips
1	TH 1040-4	0.054	0.0016	.	0.0010	100 g chips
2	DH E2135	0.0502	0.0083	.	0.0019	50 g chips
2	DH E22041	0.0469	0.0277	.	0.0035	50 g chips
1	JSS 201-15	0.0439	.	.	.	150 g chips
1	JSS 201-16	0.0413	.	.	.	150 g chips
1	NCS NS11026a	0.041	0.0025	.	.	100 g chips
2	CZ 2003A	0.0402	0.0316	.	0.0046	250 g chips
1	AR 871-521M	0.036	0.015	.	.	454 g 1 g rings
1	TH 1039-2	0.0352	0.0222	.	0.0027	100 g chips
1	ECRM 273-1C	0.0336	0.0004	.	0.0444	100 g chips
1	VS U10/5	0.032	0.0124	.	.	100 g powder
1	AR 870-819A	0.028	0.025	.	.	454 g 1 g rings
1	AR 961-719B	0.0242	0.0100	.	0.046	150 g powder
2	DH E2179	0.0232	.	.	.	50 g chips
1	AR 949-320I	0.022	0.032	.	0.0404	150 g chips
1	AR 513-1216D	0.021	0.387	.	.	250 g 0.5 g pins
1	NCS NS11040	0.019	0.0116	.	.	100 g chips
1	IARM 214A	0.018	0.002	0.0026	0.27	100 g chips
1	JSS 204-2	0.0178	.	.	.	150 g chips
1	AR 958-819B	0.0172	0.0227	.	0.0759	150 g chips
1	AR 869-920K	0.017	0.0026	.	.	454 g 1 g rings
1	AR 945-418A	0.017	0.0004	.	0.341	150 g chips
1	ECRM 295-1C	0.0166	0.0004	.	0.0615	100 g chips
1	TH 1069	0.0148	0.0129	.	0.0043	100 g chips last
1	ECRM 298-1C	0.0146	0.0006	.	0.263	100 g chips last
1	JK 36	0.0125	0.0126	.	0.0337	150 g chips
2	KMS HNCS-001	0.01017	0.00377	.	0.0436	100 g 1 g pins
1	JSS 1203-5	0.00876	.	.	.	150 g chips
1	SRM 166c	0.00781	.	.	.	100 g chips
1	NCS NS11024	0.0066	0.023	.	.	100 g chips last
1	AR 892-120E	0.0057	0.0028	.	.	454 g 1 g pins

C, S, O, N IN IRON AND STEEL, CHART 4 of 4

= class, 1 = CRM and 2 = RM analysis in mass %

#	Number	Carbon	Sulfur	Oxygen	Nitrogen	Units
1	NCS NS11039	0.0051	0.0058	.	.	100 g chips
2	DH E2156	0.00483	0.01515	.	.	50 g chips
1	JSS 1202-4	0.00476	.	.	.	150 g chips
1	NCS NS11041	0.0040	0.0053	.	.	100 g chips
2	DH E2163	0.0036	0.0026	.	.	50 g chips
1	VS U14/5	0.0023	0.0057	.	.	100 g chips
1	JSS 1207-3	0.00221	.	.	.	150 g chips
1	NCS NS11012a	0.0021	0.0068	.	.	100 g chips
2	CZ 2025A	0.0020	0.0018	.	.	200 g chips
1	JSS 1206-2	0.00192	.	.	.	150 g chips
2	KMS LCSN-001	0.00169	0.00135	.	0.00045	100 g chips
1	JSS 1205-3	0.00081	.	.	.	150 g chips
1	SRM 131H	(0.00078)	0.00074	.	.	100 g chips
2	KMS LCSN-001e	0.0009	0.0008	0.0010	0.0005	100 g 1 g pins
1	JSS 1201-4	0.00066	.	.	.	150 g chips
1	AR 673-120F	0.0006	0.0016	.	.	454 g 1 g rings
2	KMS LCSN-003a	0.00048	0.00043	.	0.00050	100 g chips
2	KMS HOCs-002	0.0004	0.0010	0.0228	0.0004	100 g 1 g pins
1	JSS 243-7	.	0.379	.	.	150 g chips
1	NCS NS13032	.	0.096	.	.	100 g chips
2	DH E2154	.	0.0472	.	.	50 g chips
1	NCS NS13029	.	0.037	.	.	100 g chips
1	JSS 242-13	.	0.0297	.	.	150 g chips
2	JSM M463-1	.	0.0218	.	.	74 g 0.74 g pins
1	JSS 241-13	.	0.0202	.	.	150 g chips
1	NCS NS13028	.	0.017	.	.	100 g chips
1	NCS NS13027	.	0.0105	.	.	100 g chips
1	JSS 240-14	.	0.0042	.	.	150 g chips last of stock
1	JSS 244-12	.	0.00177	.	.	150 g chips
1	SRM 2168	.	0.00107	.	.	150 g chips

Number Carbon Sulfur Oxygen Nitrogen Units

RM OXYGEN IN STEEL SET

no uncertainties, SET ONLY discs 37 mm Ø x 20 mm

Number	O	Number	O
JSM M405a 01a	<0.001	JSM M405a 4a	0.053
JSM M405a 02a	0.018	JSM M405a 5a	0.075
JSM M405a 3a	0.037	JSM M405a 6a	0.12

Number Carbon Sulfur Oxygen Nitrogen Units

OXYGEN AND NITROGEN IN IRON AND STEEL

#	Number	O	N	Size	Form
2	JSM M403-6	0.1340	0.00054	100 g	1 g pins
2	NS16-2	0.1208	.	50 g	0.5 g pins
1	JSS 389-1	0.052	.	8 rods	5 mm Ø x 230 mm
2	SS-10-19	0.04478	0.00124	50 g	0.5 g pins
1	BAM 029-1	0.0312	0.0083	100 g	3 rods, 8 mm Ø x 80 mm
1	Y TSN012	0.0221	0.0020	25 g	0.5 g balls
1	NCS NS93028	0.0221	0.0020	25 g	0.5 g balls
1	DSZU CA05	0.0202	0.0044	100 g	rods, ~2.8 mm Ø x ~80 mm rods
1	VS 7-9	0.020	0.0043	100 g	rods, ~2.5 mm Ø x ~220 mm
1	JK 35	0.0198	no uncertainty	1 rod	10 mm Ø x 500 mm last of stock
1	JSS 387-2	0.0194	.	8 rods	5 mm Ø x 230 mm L
1	NCS NS11072	0.018	0.0014	50 g	1 g balls
2	JSM M402-8	0.01801	0.01322	100 g	1 g pins
1	JSS 387-1	0.0179	.	8 rods	5 mm Ø x 230 mm, last of stock
2	SS-3-68	0.01682	0.00459	100 g	1 g pins
1	NCS NS20050	0.0166	0.0026	50 g	1 g balls
1	NCS NS93021	0.0160	0.0017	50 g	1 g balls
1	Y TSN005	0.0160	0.0017	50 g	1 g balls
1	NCS NS93025	0.0157	0.0018	rod	4.8 mm Ø x 30 cm
1	DSZU CA08	0.0152	0.0034	50 g	0.5 g pins
1	JSS 386-1	0.0142	.	8 rods	5 mm Ø x 230 mm
1	NCS NS11076	0.014	0.0052	50 g	1 g balls
1	NCS NS93022	0.0130	0.0038	50 g	1 g balls
1	Y TSN006	0.0130	0.0038	50 g	1 g balls
1	VS 7-8	0.0121	0.0072	100 g	rods, ~3 mm Ø x 200 mm
1	DSZU CA06	0.0120	0.0072	100 g	rods, ~2.8 mm Ø x ~80 mm rods
1	NCS NS93027	0.0120	0.0022	50 x x	1.06 g balls
1	NCS NS11050	0.0120	0.0019	50 g	1 g balls
1	NCS NS93018	0.0117	0.0023	50 g	1 g balls
1	Y TSN002	0.0117	0.0023	50 g	1 g balls
1	BAM 028-1	0.0113	0.0029	100 g	3 rods, ~3 mm Ø x ~80 mm
1	VS 7-14/1	0.011	0.0101	100 g	rods, ~4 mm Ø x ~10 mm rods
1	NCS NS11074	0.011	0.0018	50 g	1 g balls
1	Y 41129	0.0108	0.0027	50 g	1 g balls
1	NCS NS11056	0.0107	0.142	50 g	1 g balls
1	NCS NS11076a	0.0102	0.0052	50 g	1 balls
1	VS 7-14/2	0.0103	0.0096	100 g	rods, ~4 mm Ø x ~10 mm rods
1	ECS 318B *	0.0103	.	1 rod,	12.7 mm Ø x 127 mm * Sale Item
2	SS-2-115	0.01017	0.00197	100 g	1 g pins
2	SS-2-114	0.01014	0.00202	100 g	1 g pins last of stock
1	VS 7-14	0.0100	0.0101	100 g	rods, ~4 mm Ø x ~10 mm rods
1	NCS NS11099	0.010	0.069	50 x 5 mm	Ø balls
1	BCS 318A *	0.0096	.	100 g	2 rods, 6.35 mm Ø x 95 mm * Sale Item
1	BAM 027-1	0.0084	0.0157	100 g	3 rods, 8 mm Ø x 80 mm
1	NCS NS28036a	0.0083	0.0067	50 g	1 balls
1	58A MS51012	0.0079	0.0149	50 g	1 g balls
1	NCS NS93023	0.0078	0.0023	50 g	1 g balls
1	Y TSN007	0.0078	0.0023	50 g	1 g balls
1	JK 34	0.0068	.	1 rod	8 mm Ø x 500 mm each
1	NCS NS11037	0.0066	0.109	25 g	0.5 g pins
1	NCS NS11052	0.0062	0.00075	50 g	1 g balls
1	NCS NS20049	0.0058	0.0040	50 g	1 g balls
1	DSZU CA07	0.0055	0.0292	100 g	rods, ~1.7 mm Ø x ~80 mm rods
1	VS 7-7	0.0055	0.0292	50 g	~1.5 mm Ø x ~115 mm rods
1	NCS NS11064	0.0051	0.028	50 g	1 balls
1	NCS NS93031	0.0044	0.0214	50 g	1 g balls
1	Y TSN009	0.0043	0.0380	25 g	0.5 g balls
1	58A SD51075	0.0043	0.0100	50 g	1 g balls
1	NCS NS11043a	0.0042	0.030	50 g	0.5 g balls
1	NCS NS11096	0.0042	0.022	50 x 6.35 mm	Ø balls
1	NCS NS11022	0.0038	0.0820	25 g	0.5 g pins last
1	58A SD51074	0.0037	0.0253	50 g	0.5 g balls
1	NCS NS11070	0.0037	0.0012	50 g	1 g pins
1	AR 1651-921G	0.0036	0.0228	100 g	1 g pins
1	NCS NS11069	0.0036	0.0011	50 g	1 g pins
1	AR 1657-115B	0.0034	0.0319	100 g	1 g pins
1	NCS NS11073	0.0034	0.019	25 g	0.5 g balls
1	NCS NS28042c	0.0034	0.0042	50 g	1 balls
1	NCS NS11063a	0.0033	0.047	50 g	0.5 g balls
1	NCS NS93030	0.0033	0.0233	50 g	1 g balls

#	Number	O	N	Size	Form
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OXYGEN AND NITROGEN IN IRON AND STEEL

#	Number	O	N	Size	Form
1	AR 1647-419K	0.0031	0.140	100 g	1 g pins
1	BAM 026-1	0.0031	0.0053	100 g	3 rods, 8 mm Ø x 80 mm
1	NCS NS11098	0.0031	0.0030	50 x 6.35 mm	Ø balls
1	NCS NS28042a	0.0031	0.0058	50 g	1 balls
1	NCS NS11063	0.0030	0.044	50 g	0.5 g balls
1	NCS NS28042b	0.0030	0.0043	50 g	1 balls
1	NCS NS41007	0.0029	0.0037	20 g	1 g balls
1	NCS NS93020	0.0029	0.0036	50 g	1 g balls
1	Y TSN004	0.0029	0.0036	50 g	1 g balls
1	NCS NS11063b	0.0028	0.048	50 g	0.5 g balls
1	JK 32	0.0028	.	1 rod	10 mm Ø x 500 mm each
1	BAM 026-2	0.0025	0.0042	100 g	3 rods, 8 mm Ø x 80 mm
1	NCS NS93029	0.0024	0.0826	50 g	1 g balls
1	SRM 1754	0.0024	0.0081	1 rod	0.95 cm x 0.95 cm x 10.2 cm last
1	NCS NS28044b	0.0024	0.0032	50 g	1 balls
1	NCS NS11095	0.0022	0.081	50 x 6.35 mm	Ø balls
1	NCS NS11054	0.0023	0.0096	50 g	1 g balls
1	NCS NS20035b	0.0022	0.0061	50 g	1 g balls
1	NCS NS11053	0.0022	0.0032	50 g	1 g balls
1	NCS NS93019	0.0021	0.0035	50 g	1 g balls
1	Y TSN003	0.0021	0.0035	50 g	1 g balls
1	Y TSN008	0.0020	0.0557	25 g	0.5 g balls
1	NCS NS11094	0.0019	0.0062	50 x 6.35 mm	Ø balls
1	NCS NS11065	0.0019	0.007	50 g	1 balls
1	NCS NS11044a	0.0018	0.063	50 g	1 balls
1	NCS NS28044a	0.0018	0.002	50 g	1 balls
1	JSS 384-2	0.00163	.	8 rods	5 mm Ø x 230 mm L
1	NCS NS11061	0.0016	0.0036	50 g	1 g balls
1	NCS NS11061a	0.0016	0.0031	50 g	1 balls
1	JK 31	0.0015	.	1 rod	8 mm Ø x 500 mm each
1	NCS NS11075	0.0014	0.0089	50 g	1 g balls
1	NCS NS11051	0.0012	0.0045	50 g	1 g balls
1	NCS NS11062	0.0012	0.0022	50 g	1 balls
1	NCS NS21002b	0.00115	0.0055	50 g	1 g balls
2	SS-4-102	0.00114	0.01329	100 g	1 g pins last
1	NCS NS11065a	0.0011	0.0071	50 g	1 balls
1	NCS NS93024	0.0011	0.0055	50 g	1 g balls
1	NCS NS93026	0.0011	0.0055	rod	4.8 mm Ø x 30 cm
1	Y TSN010	0.0011	0.0055	50 g	1 g balls
1	ECRM 267-1	0.00096	0.0266	100 g	1 g pins
2	SS-4-116	0.00096	0.01291	100 g	1 g pins
2	SS-4-115	0.00095	0.01305	100 g	1 g pins last
2	JSM M401-22	0.00092	0.00504	50 g	0.5 g pins last
1	AR 1658-717D	0.0009	0.0756	100 g	1 g pins
1	VS 7-6	0.0009	0.0067	100 g	~3 mm Ø x ~200 mm rods
1	DSZU CA04	0.00088	0.0067	100 g	rods, ~2.8 mm Ø x ~80 mm rods
1	NCS NS11066a	0.00084	0.0041	50 g	1 balls
2	JSM M401-24	0.00073	0.00501	50 g	0.5 g pins
1	AR 644-420S	0.0008	0.0077	100 g	1 g pins
1	NCS NS11097	0.0008	0.0072	50 x 6.35 mm	Ø balls
1	AR 1653-819D	0.0007	0.0030	100 g	1 g pins
1	Y TSN011a	0.00068	0.0091	50 g	1 g balls
1	NCS NS11071	0.00065	0.0068	50 g	1 g balls
1	NCS NS11055C	0.00065	0.0023	50 g	1 balls
1	NCS NS11055	0.00058	0.0028	50 g	1 g balls
1	NCS NS11055b	0.00054	0.0031	50 g	1 balls
1	Y TSN013	0.00049	0.0042	50 g	1 g balls
1	NCS NS11067	0.00044	0.0061	50 g	1 balls
1	NCS NS11066	0.00042	0.005	50 g	1 balls
1	JSS 390-1	0.00042	.	~ 380g	8 Rods 6 mm Ø x 230 mm
1	SRM 1094	0.0004	.	1 rod	0.6 mm Ø x 8.2 cm
1	NCS NS11068	0.0003	0.0028	50 g	1 balls
1	DSZU CA01a	0.00035	0.0029	45 g	0.9 g pins
1	JSS 382-1	0.00026	.	~ 380g	8 Rods 6 mm Ø x 230 mm
1	JSAC 0111	0.00023	.	32 mm Ø x 30 mm	disc
1	NCS NS11055a	0.0002	0.0022	50 g	1 balls
1	JSS 381-1	(0.00008)	.	~ 380 g	8 Rods 6 mm Ø x 230 mm

#	Number	O	N	Size	Form
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NITROGEN IN IRON AND STEEL

= class, 1 = CRM 2 = RM analysis in mass %

#	Number	N	Size	Form
1	ECRM 268-1C	2.03	100 g	chips
1	NCS NS11103	0.986	50 g	chips
1	NCS NS11106	0.84	50 g	chips
1	NCS NS11105	0.807	50 g	chips
1	NCS NS11104	0.59	50 g	chips
1	NCS NS11102	0.564	50 g	chips
1	JSS 370-2	0.415	150 g	chips
1	VS 7-22	0.398	100 g	chips
1	NCS NS11101	0.293	50 g	chips
1	JSS 371-2	0.199	150 g	chips
1	VS 7-21	0.0241	100 g	chips
2	DH E2126	0.0153	50 g	chips last of stock
1	DH E21-261	0.0152	50 g	chips
1	VS 7-11	0.0152	100 g	chips
1	DSZU CA09	0.0105	50 g	0.5 g pins
1	NCS NS13011	0.0099	150 g	chips
1	NCS NS13010	0.0096	150 g	chips
1	VS 7-3/2	0.0093	100 g	chips
1	NCS NS14001	0.0081	100 g	chips
1	NCS NS13009	0.0078	150 g	chips
1	NCS NS13037	0.0067	150 g	chips
1	NCS NS13036	0.0064	150 g	chips
1	NCS NS14003	0.0048	100 g	chips
1	JSS 367-9	0.0044	150 g	chips
1	NCS NS13034	0.0044	150 g	chips
1	NCS NS13033	0.0043	150 g	chips
1	VS 7-2/2	0.0039	100 g	chips
1	VS 7-10	0.0038	100 g	chips
1	JSS 366-9	0.00065	150 g	chips

CRM ALUMINUM IN STEEL

analysis listed in mass % chips 150 g

Number	Al	B	P	Si
JSS 330-4	0.0063	.	.	.

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HYDROGEN IN IRON AND STEEL

analysis listed in mass % except * which is mg/kg (ppm)

#	Number	H*	C	S	O	N	Size	Form	Comments
1	BS CSONH	8	1.02	0.011	0.116	0.025	100 g	powder	17034
1	DSZU CA033	7.2	.	.	0.0071	0.051	50 g	1 g pins	
2	SS-5-33	7.3	.	.	.	.	100 g	10 g rods	4 mm Ø x 100 mm each
1	58A HP51012	7.2	.	.	.	.	50 g	1 g balls	
1	NCS NS11082	7.2	.	.	.	.	20 g	1 g pins	
1	JSS GS7-2	6.6	.	.	.	.	8 rods	5 mm Ø x 230 mm each	
1	CMSI 3012-3	6.5	.	.	.	.	40 g	2 g balls	
1	NCS NS11080	6.4	.	.	.	.	20 g	1 g pins	
1	DSZU CA034	6.2	.	.	0.0054	0.073	50 g	1 g pins	
1	DSZU CA031	6.1	.	.	0.0025	0.0072	50 g	1 g pins	
1	NCS NS20001a	6.00	.	.	.	.	20 g	1 g balls	
1	TL 2101	6.0	0.0238	(0.0010)	0.0035	0.0964	50 g	0.5 g pins	
1	NCS NS11078	5.8	.	.	0.0031	0.031	50 g	1 g balls	
1	58A HP51011	5.8	.	.	0.0033	0.0305	50 g	1 g balls	
1	Y TSH001	4.6	.	.	.	.	50 g	1 g balls	
1	58A HP51010	4.1	.	.	.	.	50 g	1 g balls	
1	NCS NS20042	3.55	.	.	.	.	20 g	1 g balls	
1	58A HP51009	2.9	.	.	.	.	50 g	1 g balls	
1	NCS NS11081	2.7	.	.	.	.	20 g	1 g pins	
1	TL 2100	2.6	0.0304	0.0030	0.0042	0.0304	50 g	0.5 g pins	
1	58A HP51008	2.2	.	.	.	.	50 g	1 g balls	
1	NCS NS11084	2.2	.	.	.	.	20 g	1 g pins	
1	58A NK51085	2.0	.	.	0.0025	0.058	50 g	1 g balls	
1	BS 1040	2.0	0.402	0.032	0.0023	0.0111	1 disc	28 mmØ x ~7 or 19+ mm	17034
1	JSS GS9-2	2.0	.	.	.	.	8 rods	5 mm Ø x 245 mm each	
1	58A HP51007	1.8	.	.	.	.	50 g	1 g balls	
1	NCS NS11077	1.8	.	.	0.0036	0.034	50 g	1 g balls	
1	DSZU CA032	1.7	.	.	0.0097	0.0309	50 g	1 g pins	
1	58A HP51006	1.6	.	.	0.0038	0.0330	50 g	1 g balls	
1	58A HP51005	1.3	.	.	.	.	50 g	1 g balls	
1	NCS NS11083	1.3	.	.	.	.	20 g	1 g pins	
1	BAM CRM H2	1.26	.	.	.	.	100 g	1 g pins	EXPIRES DEC 31/2026
1	NCS NS20025b	1.1	.	.	.	.	20 g	1 g balls	
2	JSM M481-27	1.01	.	.	.	.	100 g	1 g balls	
1	BS HON-U	1.0	0.050	0.0018	0.0023	0.0254	100 g	1 g balls	17034
1	BAM CRM H1	0.97	.	.	.	.	100 g	1 g pins	EXPIRES DEC 31/2023
1	58A HP51004	0.9	.	.	.	.	50 g	1 g balls	
2	JSM M481-1	0.9	.	.	.	.	100 g	1 g balls	
1	58A HP51003	0.8	.	.	.	.	50 g	1 g balls	
1	58A HP51002	0.5	.	.	.	.	50 g	1 g balls	

#	Number	H*	C	S	O	N	Size	Form	Comments
1	CZ 2016B	2.15	0.0047	.	.	.	200 g	chips	34, 17025
1	CTIF FB20	2.114	0.128	.	.	.	100 g	chips	
2	CZ 2016A	2.053	0.0048	.	.	.	100 g	chips	
1	NCS NS16001	2.02	0.0014	.	.	.	100 g	chips	last
1	AR 301-1018D	2.01	0.0172	.	.	.	150 g	powder	
2	CZ 2015A	1.996	0.0157	.	.	.	100 g	chips	
1	CZ 2015B	1.99	0.017	.	.	.	200 g	chips	34, 17025
1	NCS NS11059	1.95	0.143	.	.	.	50 g	chips	
1	AR 299-614B	0.97	0.0102	.	.	.	150 g	powder	
1	BS CE 216 *	.	0.043	.	.	.	150 g	chips	* clearance sale
1	BS CE 219 *	.	0.038	.	.	.	150 g	chips	* clearance sale
1	BS CE 217 *	.	0.029	.	.	.	150 g	chips	* clearance sale

CAST IRON CHIPS AND POWDER

= class, where 1 = CRM and 2 = RM

#	Number	C%	S%	N%	Units	Comment
1	NH M03	5.63	0.008	.	150 g chips	
1	ECRM 490-1	4.813	0.0040	0.0030	100 g chips	
1	CZ 2024B	4.40	0.047	.	200 g chips	34, 17025
2	DH E2502	4.230	0.0498	.	50 g chips	
1	AR 304-120B	4.22	0.0215	.	150 g powder	
1	CZ 2023B	4.06	0.114	.	200 g chips	34, 17025
2	CZ 2023A	4.029	0.0886	.	100 g chips	
1	NCS HC93001	4.01	0.069	.	100 g chips	
1	NCS NS11057	3.98	0.079	.	50 g chips	
1	AR 323-921E	3.89	0.083	.	250 g powder	
1	CZ 2022B	3.86	0.085	.	200 g chips	34, 17025
1	CZ 2021B	3.80	0.043	.	200 g chips	34, 17025
1	NCS NS11058	3.76	0.022	.	50 g chips	
1	AR 309-219D	3.62	0.0191	.	150 g powder	
1	VS Ch11/4	3.61	0.0204	.	100 g powder	
1	NCS NS16002	3.60	0.0186	.	100 g chips	
1	VS Ch10/4	3.59	0.085	.	100 g powder	
1	CTIF FB20-2	3.557	0.0614	.	100 g chips	
1	CTIF FB20-1	3.552	0.059	.	100 g chips	
1	CZ 2020B	3.52	0.043	.	200 g chips	34, 17025
1	ECRM 485-3	3.514	0.1488	0.0081	100 g chips	
1	AR 306-817B	3.48	0.0202	.	150 g powder	
2	TH 1023-3	3.45	0.0048	.	100 g chips	
2	TH 1050	3.424	0.143	.	100 g chips	
1	CZ 2019B	3.43	0.017	.	200 g chips	34, 17025
2	HRT 530-033	3.33	0.011	.	150 g powder	
2	HRT 530-033A	3.33	0.011	.	1 kg powder	
1	AR 322-919A	3.32	0.034	.	250 g powder	
1	AR 302-620C	3.31	0.0203	.	150 g powder	
2	AR 300-1012A	3.26	0.021	.	150 g powder	
1	ECRM 492-1	3.258	0.0854	0.0048	100 g chips	
1	VS Ch22	3.16	0.106	.	100 g powder	
1	AR 315-220H	3.08	0.108	.	150 g powder	
1	CZ 2018B	3.07	0.014	.	200 g chips	34, 17025
1	CTIF FB 13	2.959	0.0973	.	100 g chips	
1	AR 318-1015C	2.95	0.042	.	150 g powder	
1	VS Ch9/6	2.94	0.095	.	100 g powder	
1	NCS NS11060	2.93	0.101	.	50 g chips	
1	SRM 334	2.83	0.043	.	150 g chips	
1	CZ 2017B	2.57	0.095	.	200 g chips	34, 17025
1	NCS NS13001	2.51	0.020	.	100 g chips	
2	CZ 2017A	2.463	0.0755	.	100 g chips	

S, O, N, H, C IN NON-FERROUS METALS

= class, where 1 = CRM and 2 = RM

analysis listed in mg/kg

#	Number	Material	Carbon	Sulfur	Oxygen	Nitrogen	Hydrogen	Size & Form
1	AA Alu-H2	Aluminum	.	.	.	.	0.068	10 rods, 0.5" Ø x ~24"
1	58A CP54008	Copper	.	94	.	.	.	50 g chips
1	IMN Cu 90-1	Copper	.	83.7	.	.	.	250 g chips
1	58A CP54006	Copper	.	64	.	.	.	50 g chips
1	58A CP54005	Copper	.	53	.	.	.	50 g chips
1	IMN Cu 50-1	Copper	.	49.6	.	.	.	250 g chips last
1	58A CP54007	Copper	.	27	.	.	.	50 g chips
1	IMN Cu S-20	Copper	.	23.1	.	.	.	150 g chips
1	SRM 885	Copper	Ag:5	18	310	Pb:2	.	200 g of 1 g pins Trace As, Bi, Fe, Ni, Sb, Sn, and Zn
1	58A CP54004	Copper	.	13	.	.	.	50 g chips
1	AR 145-1020L	Copper	.	10	188	.	.	100 g of 1 g pins
1	AR 147-521L	Copper	.	5	3	.	.	454 g of 1 g pins
1	IMN CuS-L	Copper	.	4.24	.	.	.	150 g chips
1	IMN Cu 600/1	Copper	.	.	581	.	.	220 g of rods 6 mm Ø x 105 mm
1	NCS NS11035	Copper	.	.	479	.	.	25 g of 1 g pins
1	BCR 058	Copper	.	.	390	.	.	rod, 7 mm Ø x 50 mm
2	BAM 379/3	Copper	.	.	378	.	.	disc, 40 mm Ø x 30 mm
1	NCS NS11038	Copper	.	.	376	.	.	25 g of 1 g pins
1	NCS NS11034	Copper	.	.	261	.	.	25 g of 1 g pins
2	BAM 379/2	Copper	.	.	212	.	.	disc, 40 mm Ø x 30 mm
1	NCS NS11036	Copper	.	.	208	.	.	25 g of 1 g pins last of stock
1	IMN Cu 100/5	Copper	.	.	163.7	.	.	200 g of rod 20 mm Ø x 100 mm
1	DSZU CA023	Copper	.	.	158	.	(2.1)	50 g of 0.5 g pins
1	BCR 022A	Copper	.	.	138	.	.	disc, 26 mm Ø x 9 mm
1	BCR 022B	Copper	.	.	138	.	.	rod, 9 mm Ø x 50 mm
1	NCS NS11033	Copper	.	.	135	.	.	25 g of 1 g pins
1	IMN Cu 100	Copper	.	.	123	.	.	150 g of rod 5 mm Ø x 100 mm
2	BAM 379/1	Copper	.	.	38	.	.	disc, 40 mm Ø x 30 mm
1	NCS NS11032	Copper	.	.	18	.	.	25 g of 1 g pins
1	NCS NS11031	Copper	.	.	10	.	.	25 g of 1 g pins
1	DSZU CA021	Copper	.	.	7.4	.	(1.9)	50 g of 1 g pins
1	IMN Cu 10/1	Copper	.	.	3.8	.	.	150 g of rod 6 mm Ø x 110 mm
1	NCS NS11030	Copper	.	.	2.8	.	.	rod, 6 mm Ø x 110 mm
1	IMN Cu 10	Copper	.	.	2.1	.	.	150 g of rod 5 mm Ø x 100 mm
1	BCR 054R	Copper	.	.	0.47	.	.	rod, 7 mm Ø x 50 mm
1	IMN Ni-2	Nickel	128	149	.	.	.	100 g chips last of stock
1	SRM 861	Nickel	.	0.561	.	.	.	50 g chips
1	58A HC51001	Nickel	.	.	20	51	.	20 g cube 4mm x 4mm x 5mm
1	58A HC52001	Nickel	.	.	10	6.3	.	20 g cube 4mm x 4mm x 5mm
1	IMN Ag10/1	Silver	.	.	11	.	.	2 rods, 6 mm Ø x 100 mm
1	BCR 275	Zircaloy-4	113	.	1670	39.0	.	10 pcs 13 mm Ø x 1 mm each
1	BCR 276	Zircaloy-4	108	.	1540	41	.	100 pcs 4.5 mm Ø x 2 mm each
1	AR 590-815C	Zirconium	160	.	.	.	10	25 g of 0.25 g pins

#	Number	Material	Carbon	Sulfur	Oxygen	Nitrogen	Hydrogen	Size & Form								
CRM COPPER PINS			analysis listed in mg/kg					50g of 0.31g pins								
Number	Ag	As	Bi	Cd	Co	Cr	Fe	Mn	Ni	Pb	S	Sb	Se	Sn	Te	Zn
IMN 001	27.1	3.13	1.39	(0.11)	2.09	3.53	13.9	5.16	3.64	4.02	5.99	2.4	1.34	3.39	1.23	4.57

RM PURITY NICKEL POWDER

certified analysis listed in mg/kg, no uncertainties

informational values

100 g units

Number	Al	C	Cr	Cu	Fe	Mn	Mo	O	P	Pb	S	Si	Ag	As	B	Ba	Be	Bi	Ca	Cd	Co	Ga	H	In	Mg	N	Na	Sb	Se	Sn	Te	Ti	Tl	V	Zn
BS HPN-1	70	268	22	2	202	2	3	1850	5	0.2	4	6	<0.1	<0.5	<2	<1	<1	<0.2	3	<0.1	<2	<0.5	99	<0.2	1	27	4	<0.1	<0.2	<1	<0.2	<1	<0.1	<1	<1

