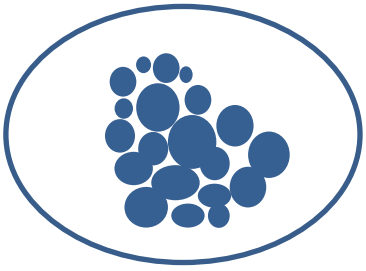
CARBIDE/NITRIDE/ BORIDE/SILICIDE MATERIALS

- Particle Size Conversion Table ..... I-II 03
- Carbide/Nitride/Boride/Silicide Materials ..... I-II 04



Carbide/Nitride/Boride/Silicide Materials

PURITY

Purity is based on spectrographic values of trace metals found, i. e. 99.999% pure indicates that 0.001% (10 ppm) total of trace metals have been observed. Gases, Carbon and Sulfur are not included in the analysis but can possibly be determined if needed.

PARTICLE SIZE

Particle sizes are listed as determined with sieves. “-100,+325 mesh” means that all of the particles pass through a 100 mesh screen and are completely retained on a 325 mesh screen. “Mesh” indicates the number of sieve openings per linear inch.

CERTIFICATE

Each batch of material is shipped with a certificate of analysis and represents the current batch only.

Material Safety Data Sheet (MSDS) will be attached if the materials are dangerous.



CUSTOM MANUFACTURING

Funcmater provide custom service if there is no dimensions or purity you want on the list, Don’t hesitate to contact us.

Particle Size Conversion Table

MESH SIZE	APPROXIMATE DIAMETER(mm)	MESH SIZE	APPROXIMATE DIAMETER(mm)
2	8	80	0.180
3	6.7	100	0.150
4	4.75	120	0.125
5	4.00	140	0.106
6	3.35	170	0.090
7	2.80	200	0.075
8	2.36	230	0.063
10	2.00	270	0.053
12	1.70	325	0.045
14	1.40	400	0.040
16	1.18	500	0.025
18	1.00	600	0.023
20	0.850	800	0.018
25	0.710	1000	0.013
30	0.600	1250	0.010
35	0.500	2000	0.0065
40	0.425	2500	0.0050
45	0.355	5000	0.0026
50	0.300	8000	0.0016
60	0.250	10000	0.0013
70	0.212		

Carbides/Nitrides/Borides/Silicides

C Carbides

CHEMICAL NAME	FORMULA	CAS No.	PURITY	PARTICLE SIZE
Aluminum Carbide	Al_4C_3	1299-86-1	2N/2N8	-325Mesh
Boron Carbide	B_4C	12069-32-8	2N-3N	D50<15μm
Carbon	C	7440-44-0	4N	D50<20μm
Chromium Carbide	Cr_3C_2	12012-35-0	2N-3N5	-325Mesh
Hafnium Carbide	HfC	12069-85-1	2N5	1-3μm
Iron Carbide	Fe_3C	12011-67-5	2N	-325Mesh
Magnesium carbide	Mg_2C_3	12151-74-5	2N5	-325Mesh
Manganese Carbide	$Mn_{23}C_6$		2N	-325Mesh
Molybdenum Carbide	Mo_2C	12069-89-5	2N5	-325Mesh
Molybdenum Carbide	MoC		2N5	-325Mesh
Niobium Carbide	NbC	12069-94-2	2N5	-325Mesh D90<10μm
Silicon Carbide	SiC	409-21-2	2N5-4N	-325Mesh D90<10μm
Tantalum Carbide	TaC	12070-06-3	2N5/3N	-325Mesh
Tantalum Hafnium Carbide	Ta_4HfC_5	71243-79-3	2N-3N	-325Mesh
Tantalum Niobium Carbide (TaNbC(60/40))	TaNbC(50/50)		2N5	FSSS≈2μm
Tantalum Niobium Carbide (TaNbC(80/20))	TaNbC(80/20)		2N5	FSSS≈2μm
Titanium Aluminum Carbide	Ti_3AlC_2		2N/2N5	-200Mesh
Titanium Carbide	TiC		2N-3N	-325Mesh 5-50μm
Titanium Carbonitride	TiC/TiN (50/50%))	196506-01-1	2N5	-325Mesh
Tungsten Carbide	WC	12070-08-5	2N5	-325Mesh
Tungsten carbide Cobalt	WC:Co; 94:6 wt%		2N5/3N	-200Mesh
Vanadium Carbide	VC	12070-12-1	2N5	-325Mesh
Zirconium Carbide	ZrC	12774-15-1	2N/2N5	-325Mesh D50: 30-50μm

N Nitrides

CHEMICAL NAME	FORMULA	CAS No.	PURITY	PARTICLE SIZE
Aluminum Nitride	AlN	24304-00-5	2N5-3N5	-325Mesh D90<5μm
Aluminum Nitride-Titanium Nitride	AlN-TiN		2N5	-325Mesh
Aluminum Oxynitride	AlON		3N	D50:20μm
Baium Nitride	Ba_3N_2	12047-79-9	2N5	-325Mesh
Boron Nitride	BN	10043-11-5	2N-3N	D50:20μm/15-100μm
Calcium Nitride	Ca_3N_2	12013-82-0	2N/2N5	-200Mesh
Chromium Nitride	CrN	12053-27-9	2N-3N	-325Mesh
Copper Nitride	Cu_3N	1308-80-1	3N	-325Mesh
Gallium Nitride	GaN	25617-97-4	4N-6N	-100Mesh
Hafnium Nitride	HfN	25817-87-2	2N8	-325Mesh
Indium Nitride	InN	25617-98-5	3N	-100Mesh
Iron nitride	FeN	12023-20-0	3N	D50: 5-10μm
Magnesium Nitride	Mg_3N_2	12057-71-5	2N5	-325Mesh
Manganese Nitride	Mn_4N	12033-07-7	2N5	-325Mesh
Nickel Nitride	Ni_3N	12033-45-3	2N5	-325Mesh
Niobium Nitride	NbN	24621-21-4	2N-3N	-325Mesh
Silicon Nitride	Si_3N_4	12033-89-5	2N5-4N	D50<2μm/D90<10μm
Tantalum Nitride	TaN	12033-62-4	3N	-325Mesh
Titanium Nitride	TiN	25583-20-4	2N5-3N5	-325Mesh D90<30μm
Vanadium Nitride	VN	24646-85-3	2N5	-325Mesh
Zirconium Nitride	ZrN	25658-42-8	2N5	-325Mesh 22-45μm/45-75μm

B Borides

CHEMICAL NAME	FORMULA	CAS No.	PURITY	PARTICLE SIZE
Aluminium Boride	AlB_2	12041-50-8	2N5	-200Mesh
Barium Boride	BaB_6	12046-08-1	2N	-325Mesh
Boron	B	7440-42-8	2N-4N	-300Mesh
Calcium Boride	CaB_6	12007-99-7	2N	-20-100Mesh
Cerium Boride	CeB_6	12008-02-5	2N5	-325Mesh
Chromium Diboride	CrB_2	12007-16-8	2N	-325Mesh
Hafnium Boride	HfB_2	12007-23-7	2N5	D50<5μm
Iron (II) Boride	FeB	12006-84-7	2N	-325Mesh
Lanthanum hexaborid	LaB_6	12008-21-8	2N5	-325Mesh
Magnesium Boride	MgB_2	12007-25-9	2N	-325Mesh D90<20μm
Manganese Boride	MnB	63412-06-6	2N5	-100Mesh
Molybdenum boride (MoB)	MoB	12006-98-3	2N/2N5	-325Mesh
Niobium Boride	NbB	12045-19-1	2N	-100Mesh
Silicon boride	SiB_6	12008-29-6	2N/2N5	D50:2~5μm
Tantalum Diboride	TaB_2	12007-35-1	2N	-325Mesh
Titanium Boride	TiB_2	12045-63-5	2N-3N5	-400Mesh D90:1-2μm
Tungsten pentameboride	W_2B	12007-10-2	2N5	-325Mesh
Vanadium Boride	VB_2	12007-37-3	2N	-325Mesh
Zirconium Boride	ZrB_2	12045-64-6	2N5	-325Mesh



Si

Silicides

CHEMICAL NAME	FORMULA	CAS No.	PURITY	PARTICLE SIZE
Calcium Silicide	$CaSi_2$	12013-56-8	2N	-325Mesh
Chromium Silicide	$CrSi_2$	12018-09-6	2N5	D50<10μm
Cobalt Silicon	$CoSi_2$	12017-12-8	2N5	-325Mesh
Copper silicide	Cu_5Si	12159-07-8	2N5	-325Mesh
Hafnium Silicide	$HfSi_2$	12401-56-8	2N	-325Mesh
Iron Silicide	$FeSi_2$	12022-95-6	2N	-325Mesh
Magnesium Silicide	Mg_2Si	22831-39-6	2N	-200Mesh
Molybdenum Silicide	$MoSi_2$	12136-78-6	2N/2N5	-325Mesh D90<12μm
Niobium Silicide	$NbSi_2$	12034-80-9	2N5	-325Mesh
Silicon	Si	7440-21-3	2N-4N	-325Mesh D90<5μm
Tantalum disilicide	$TaSi_2$	12039-79-1	2N5	D50:30~50μm
Tantalum Silicide	TaSi	12039-79-1	2N5	-325Mesh
Titanium Silicide	$TiSi_2$	12039-83-7	2N5	-325Mesh
Titanium silicide	Ti_5Si_3	12067-57-1	2N5	-325Mesh
Tungsten Silicide	WSi_2	12039-88-2	2N5	-325Mesh
Vanadium Silicide	VSi_2	12039-87-1	2N	-200Mesh
Zirconium Silicide	$ZrSi_2$	12039-90-6	2N5	-325Mesh



