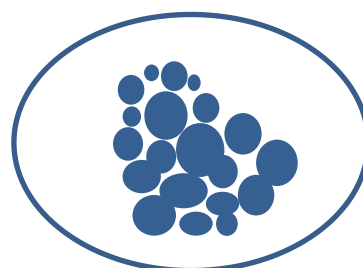


# CARBIDE/NITRIDE/ BORIDE/SILICIDE MATERIALS

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# Carbide/Nitride/Boride/Silicide Materials

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## 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

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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 <sub>4</sub> C <sub>3</sub>	1299-86-1	2N/2N8	-325Mesh
Boron Carbide	B <sub>4</sub> C	12069-32-8	2N-3N	D50<15µm
Carbon	C	7440-44-0	4N	D50<20µm
Chromium Carbide	Cr <sub>3</sub> C <sub>2</sub>	12012-35-0	2N-3N5	-325Mesh
Hafnium Carbide	HfC	12069-85-1	2N5	1-3µm
Iron Carbide	Fe <sub>3</sub> C	12011-67-5	2N	-325Mesh
Magnesium carbide	Mg <sub>2</sub> C <sub>3</sub>	12151-74-5	2N5	-325Mesh
Manganese Carbide	Mn <sub>23</sub> C <sub>6</sub>		2N	-325Mesh
Molybdenum Carbide	Mo <sub>2</sub> C	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 <sub>4</sub> HfC <sub>5</sub>	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 <sub>3</sub> AlC <sub>2</sub>		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
Barium Nitride	Ba <sub>3</sub> N <sub>2</sub>	12047-79-9	2N5	-325Mesh
Boron Nitride	BN	10043-11-5	2N-3N	D50:20µm/15-100µm
Calcium Nitride	Ca <sub>3</sub> N <sub>2</sub>	12013-82-0	2N/2N5	-200Mesh
Chromium Nitride	CrN	12053-27-9	2N-3N	-325Mesh
Copper Nitride	Cu <sub>3</sub> N	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 <sub>3</sub> N <sub>2</sub>	12057-71-5	2N5	-325Mesh
Manganese Nitride	Mn <sub>4</sub> N	12033-07-7	2N5	-325Mesh
Nickel Nitride	Ni <sub>3</sub> N	12033-45-3	2N5	-325Mesh
Niobium Nitride	NbN	24621-21-4	2N-3N	-325Mesh
Silicon Nitride	Si <sub>3</sub> N <sub>4</sub>	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 <sub>2</sub>	12041-50-8	2N5	-200Mesh
Barium Boride	BaB <sub>6</sub>	12046-08-1	2N	-325Mesh
Boron	B	7440-42-8	2N-4N	-300Mesh
Calcium Boride	CaB <sub>6</sub>	12007-99-7	2N	-20-100Mesh
Cerium Boride	CeB <sub>6</sub>	12008-02-5	2N5	-325Mesh
Chromium Diboride	CrB <sub>2</sub>	12007-16-8	2N	-325Mesh
Hafnium Boride	HfB <sub>2</sub>	12007-23-7	2N5	D50<5µm
Iron (II) Boride	FeB	12006-84-7	2N	-325Mesh
Lanthanum hexaborid	LaB <sub>6</sub>	12008-21-8	2N5	-325Mesh
Magnesium Boride	MgB <sub>2</sub>	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 <sub>6</sub>	12008-29-6	2N/2N5	D50:2~5µm
Tantalum Diboride	TaB <sub>2</sub>	12007-35-1	2N	-325Mesh
Titanium Boride	TiB <sub>2</sub>	12045-63-5	2N-3N5	-400Mesh D90:1-2µm
Tungsten pentameboride	W <sub>2</sub> B	12007-10-2	2N5	-325Mesh
Vanadium Boride	VB <sub>2</sub>	12007-37-3	2N	-325Mesh
Zirconium Boride	ZrB <sub>2</sub>	12045-64-6	2N5	-325Mesh



Si

## Silicides

CHEMICAL NAME	FORMULA	CAS No.	PURITY	PARTICLE SIZE
Calcium Silicide	CaSi <sub>2</sub>	12013-56-8	2N	-325Mesh
Chromium Silicide	CrSi <sub>2</sub>	12018-09-6	2N5	D50<10µm
Cobalt Silicon	CoSi <sub>2</sub>	12017-12-8	2N5	-325Mesh
Copper silicide	Cu <sub>5</sub> Si	12159-07-8	2N5	-325Mesh
Hafnium Silicide	HfSi <sub>2</sub>	12401-56-8	2N	-325Mesh
Iron Silicide	FeSi <sub>2</sub>	12022-95-6	2N	-325Mesh
Magnesium Silicide	Mg <sub>2</sub> Si	22831-39-6	2N	-200Mesh
Molybdenum Silicide	MoSi <sub>2</sub>	12136-78-6	2N/2N5	-325Mesh D90<12µm
Niobium Silicide	NbSi <sub>2</sub>	12034-80-9	2N5	-325Mesh
Silicon	Si	7440-21-3	2N-4N	-325Mesh D90<5µm
Tantalum disilicide	TaSi <sub>2</sub>	12039-79-1	2N5	D50:30~50µm
Tantalum Silicide	TaSi	12039-79-1	2N5	-325Mesh
Titanium Silicide	TiSi <sub>2</sub>	12039-83-7	2N5	-325Mesh
Titanium silicide	Ti <sub>5</sub> Si <sub>3</sub>	12067-57-1	2N5	-325Mesh
Tungsten Silicide	WSi <sub>2</sub>	12039-88-2	2N5	-325Mesh
Vanadium Silicide	VSi <sub>2</sub>	12039-87-1	2N	-200Mesh
Zirconium Silicide	ZrSi <sub>2</sub>	12039-90-6	2N5	-325Mesh

