Carbon

Carbon, widely distributed in nature, is the active element in photosynthesis and thus is found in all plant and animal life. It is a significant component of the sun, stars, comets, and most planets. Free carbon in nature occurs in three allotropic forms: amorphous, graphite, and diamond, with graphite being one of the softest known solids, and diamond being one of the hardest. Properties of final carbon products can be controlled by the manufacturing process and the type of carbon selected as raw material. There are millions of known carbon compounds, many of which are vital to organic life processes.

Carbon has a wide range of industrial applications. Fossil fuel gas such as natural gas and petroleum (crude oil) are important economic products of carbon. Carbon fiber is a strong material consisting of thin fibres of large carbon atoms. Carbon is used to form alloys with iron to form steel. Carbon black is used as the black pigment in printing ink; it is also used in rubber products. Activated charcoal is used as an excellent absorbent for small molecules, including toxins, and poisons from the digestive system. Carbon dating is widely used in archaeology to determine the age of an object (carbonaceous materials). Nanographite powder and carbon nanotubes find diverse applications in several fields, e.g., the manufacture of reinforced plastics and heat-resistant composites.

Diamond

Diamond is a metastable allotrope of carbon, where the carbon atoms are arranged in a variation of the face-centered cubic crystal structure called a diamond lattice. Diamond is renowned as a material with superlative physical qualities, most of which originate from the strong covalent bonding between its atoms. In particular, diamond has the highest hardness and thermal conductivity of any bulk material. Those properties determine the major industrial application of diamond in cutting and polishing tools and the scientific applications in diamond knives and diamond anvil cells.

38984	Diamond powder, natural, 40-60 micron
13401	Diamond powder, synthetic, <1 micron, 99.9% (metals basis)
13402	Diamond powder, synthetic, 40-60 micron, 99.9% (metals basis)

Graphite

Alfa Aesar offers a broad selection of Carbone of America Ultra Carbon graphite analytical products, including emission spectrographic electrodes and rotrodes; atomic absorption furnace tubes; and gas analysis, fusion and pyrolytic coated crucibles. Ultra Carbon originated the F graphite purification process in 1945. Today these high purity graphite products are continuously proven in laboratories throughout the world and remain the benchmark by which all others are measured.

Purity

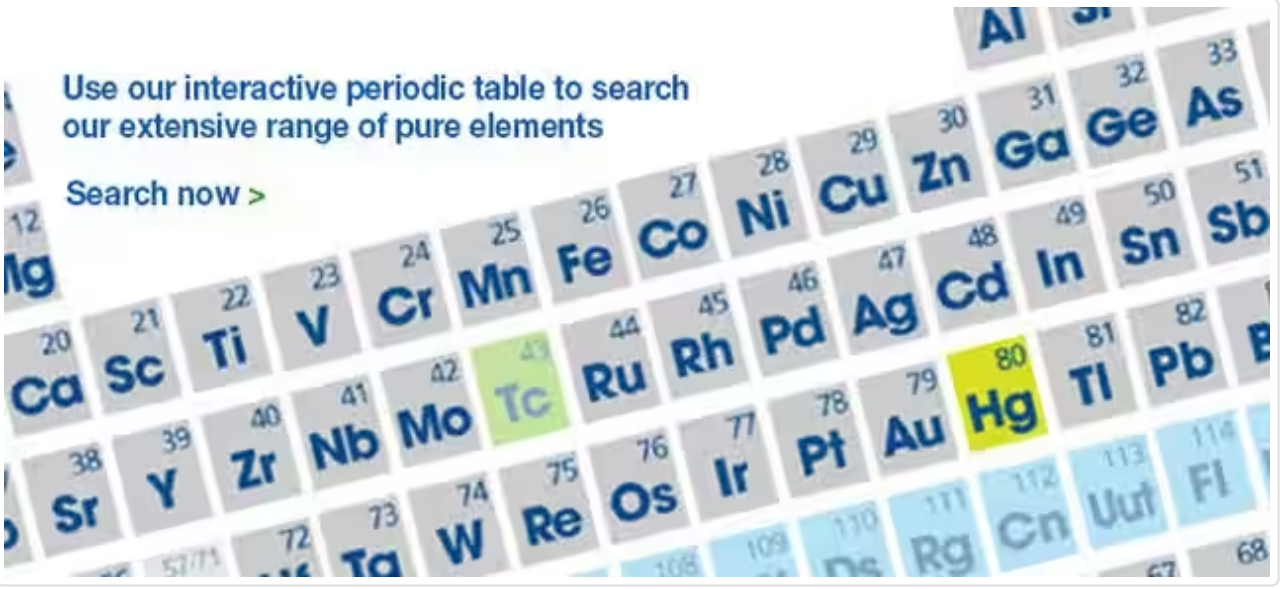
47287	Calcined petroleum coke powder, -20+80 mesh
47275	Calcined petroleum coke powder, crystalline, -325 mesh, 99%
41213	Graphite adhesive, alcohol based
41214	Graphite adhesive, aqueous based
41775	Graphite, colloidal, lubricant, aerosol spray
42465	Graphite conductive adhesive, alcohol based
42466	Graphite conductive adhesive, aqueous based
43480	Graphite flake, median 7-10 micron, 99% (metals basis)
43319	Graphite flake, natural, -10 mesh, 99.9% (metals basis)
43209	Graphite flake, natural, -325 mesh, 99.8% (metals basis)
43078	Graphite foil, 0.13mm (0.005in) thick, 99.8% (metals basis)
10832	Graphite foil, 0.254mm (0.01in) thick, 99.8% (metals basis)
42952	Graphite foil, 0.4mm (0.015in) thick, 99.8% (metals basis)

42953	Graphite foil, 0.5mm (0.02in) thick, 99.8% (metals basis)
43083	Graphite foil, 1mm (0.04in) thick, 97% (metals basis)
42193	Graphite ink for tantalum capacitors
10132	Graphite plate, 1.27cm (0.5in) thick
43837	Graphite plate, highly oriented pyrolytic graphite (HOPG), 10x10x(1.6min)mm (0.394x0.394x0.079in)
43835	Graphite plate, highly oriented pyrolytic graphite (HOPG), 10x10x(1.6min)mm (0.394x0.394x0.079in)
43836	Graphite plate, highly oriented pyrolytic graphite (HOPG), 10x10x1mm (0.394x0.394x0.039in)
43834	Graphite plate, highly oriented pyrolytic graphite (HOPG), 10x10x1mm (0.394x0.394x0.039in)
40156	Graphite plate, pyrolytic, 1.27x9.98x9.98mm (0.05x0.393x.393in)
41831	Graphite plate, resin impregnated, 6.35mm (0.25in) thick
10129	Graphite powder, crystalline, -325 mesh, 99%
10130	Graphite powder, microcrystalline, -325 mesh, 75-82% C, 18-25% Ash
14735	Graphite powder, natural, briquetting grade, -100 mesh, 99.9995% (metals basis)
40795	Graphite powder, natural, briquetting grade, -200 mesh, 99.9995% (metals basis)
14734	Graphite powder, natural, high purity, -200 mesh, 99.9998% (metals basis)
14736	Graphite powder, natural, microcrystal grade, APS 2-15 micron, 99.9995% (metals basis)
40799	Graphite powder, natural, universal grade, -200 mesh, 99.9995% (metals basis)
43215	Graphite powder, nickel coated, -100 mesh, Ni 60%

40769	Graphite powder, synthetic, -20+100 mesh, 99% C, 0.2% max Ash
46304	Graphite powder, synthetic, APS 7-11 micron, 99%
40797	Graphite powder, synthetic, conducting grade, -200 mesh, 99.9995% (metals basis)
40798	Graphite powder, synthetic, conducting grade, -325 mesh, 99.9995% (metals basis)
45077	Graphite rod, 10.0mm (0.40in) dia, 99.997% (metals basis)
10134	Graphite rod, 1.27cm (0.5in) dia x 61cm (24in) long, 99% (metals basis)
43649	Graphite rod, 13cm (5.125in) dia x 30.5cm (12in) long, 99.998% (metals basis)
43647	Graphite rod, 13cm (5.125in) dia x 30.5cm (12in) long, 99% (metals basis)
10133	Graphite rod, 2.54cm (1.0in) dia x 61cm (24in) long, 99% (metals basis)
40765	Graphite rod, 3.05mm (0.12in) dia x 305mm (12in) long, 99.9995% (metals basis)
43800	Graphite rod, 3.8cm (1.5in) dia x 61cm (24in) long, 99% (metals basis)
45076	Graphite rod, 5.0mm (0.20in) dia, 99.997% (metals basis)
40766	Graphite rod, 6.15mm (0.242in) dia x 102mm (4in) long, 99.9995% (metals basis)
14738	Graphite rod, 6.15mm (0.242in) dia x 152mm (6in) long, 99.9995% (metals basis)
40767	Graphite rod, 6.15mm (0.242in) dia x 152mm (6in) long, 99.9995% (metals basis)
14739	Graphite rod, 6.15mm (0.242in) dia x 305mm (12in) long, 99.9995% (metals basis)
40768	Graphite rod, 6.15mm (0.242in) dia x 305mm (12in) long, 99.9995% (metals basis)
10135	Graphite rod, 6.3mm (0.25in) dia. x 61cm (24in) long, 99% (metals basis)

Elemental Carbon products

Carbon, widely distributed in nature, is the active element in photosynthesis and thus is found in all plant and animal life. It is a significant component of the sun, stars, comets, and most planets. Free carbon in nature occurs in three allotropic forms: amorphous, graphite, and diamond, with graphite being one of the softest known solids, and diamond being one of the hardest. Properties of final carbon products can be controlled by the manufacturing process and the type of carbon selected as raw material. There are millions of known carbon compounds, many of which are vital to organic life processes.



38984	Diamond powder, natural, 40-60 micron
13401	Diamond powder, synthetic, <1 micron, 99.9% (metals basis)
13402	Diamond powder, synthetic, 40-60 micron, 99.9% (metals basis)
44691	Fullerene, buckytube/nanotube, double-walled, 50 - 80%
41549	Fullerene, buckytube/nanotube, multi-walled, ground core, 7-12nm OD, 0.5-10 micron long
44508	Fullerene, buckytube/nanotube, single walled
44501	Fullerene, buckytube/nanotube, single walled, >60% SWNT
41548	Fullerene, buckytube/nanotube, single walled, as-produced
44945	Fullerene, carbon nanotube, multi-walled, 3-20 nm OD, 1-3 nm ID, 0.1-10 micron long, 95%
44790	Fullerene, carbon nanotube, multi-walled, ≤8 nm OD, 2-5 nm ID, 0.5-2 micron long
44192	Fullerene, nanotube, multi-walled, 20-50 nm OD, 5-20 micron long
43839	Fullerene, nanotube, multi-walled, 20 nm OD, 5-20 micron long
42886	Fullerene, nanotube, multi-walled, as-produced cathode deposits, core and shell
39720	Fullerene powder, 97% C{70}

42601	Fullerene powder, 98+% C{70}
39722	Fullerene powder, 99.5% C{60}
42007	Fullerene powder, 99.9+% C{60}
42600	Fullerene powder, 99+% C{70}
41182	Fullerene powder, hydroxylated, C{60}(OH)_n,
40967	Fullerene powder, mixed hydrogenated, typically 77% C{60}H_x, 22% C{70}H_y
41181	Fullerene powder, mixed refined, typically 70% C{60}, 28% C{70}, higher 2%
40968	Fullerene powder, mixed refined, typically 77% C{60}, 22% C{70}, <2% higher
40970	Fullerene powder, mixed, typically 98% C{60}, 2% C{70}
42008	Fullerene powder, sublimed, 99.9+% C{60}

Fullerenes

A fullerene is a molecule of carbon in the form of a hollow sphere, ellipsoid, tube, and many other shapes. Spherical fullerenes are also called buckyballs, and they resemble the balls used in football (soccer). Cylindrical ones are called carbon nanotubes or buckytubes. Fullerenes are similar in structure to graphite, which is composed of stacked graphene sheets of linked hexagonal rings; but they may also contain pentagonal (or sometimes heptagonal) rings. The fullerenes are also found to be soluble in common solvents such as benzene, toluene or chloroform.

44276	Aqueous dispersant for multi-walled carbon nanotubes
44691	Fullerene, buckytube/nanotube, double-walled, 50 - 80%
41549	Fullerene, buckytube/nanotube, multi-walled, ground core, 7-12nm OD, 0.5-10 micron long
44508	Fullerene, buckytube/nanotube, single walled
44501	Fullerene, buckytube/nanotube, single walled, >60% SWNT
41548	Fullerene, buckytube/nanotube, single walled, as-produced
44945	Fullerene, carbon nanotube, multi-walled, 3-20 nm OD, 1-3 nm ID, 0.1-10 micron long, 95%
44790	Fullerene, carbon nanotube, multi-walled, ≤8 nm OD, 2-5 nm ID, 0.5-2 micron long
44192	Fullerene, nanotube, multi-walled, 20-50 nm OD, 5-20 micron long
43839	Fullerene, nanotube, multi-walled, 20 nm OD, 5-20 micron long
42886	Fullerene, nanotube, multi-walled, as-produced cathode deposits, core and shell
39720	Fullerene powder, 97% C{70}
42601	Fullerene powder, 98+% C{70}
39722	Fullerene powder, 99.5% C{60}

42007	Fullerene powder, 99.9+% C{60}
42600	Fullerene powder, 99+% C{70}
41182	Fullerene powder, hydroxylated, C{60}(OH)_n,
40967	Fullerene powder, mixed hydrogenated, typically 77% C{60}H_x, 22% C{70}H_y
41181	Fullerene powder, mixed refined, typically 70% C{60}, 28% C{70}, higher 2%
40968	Fullerene powder, mixed refined, typically 77% C{60}, 22% C{70}, <2% higher
40970	Fullerene powder, mixed, typically 98% C{60}, 2% C{70}
42008	Fullerene powder, sublimed, 99.9+% C{60}

Glassy Carbon Beakers

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

39023	Glassy Carbon Beaker;Vol (ml), 100;Dia (mm), 54;Ht (mm), 70
39024	Glassy Carbon Beaker;Vol (ml), 250;Dia (mm), 75;Ht (mm), 82
39025	Glassy Carbon Beaker;Vol (ml), 400;Dia (mm), 90;Ht (mm), 86

Glassy Carbon Boats

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

	39028	Glassy Carbon Boat;Vol (ml), 10;Length (mm), 103;Width (mm), 16;Ht (mm), 10
	39026	Glassy Carbon Boat;Vol (ml), 2;Length (mm), 29;Width (mm), 16;Ht (mm), 10
	39027	Glassy Carbon Boat;Vol (ml), 3;Length (mm), 53;Width (mm), 16;Ht (mm),10

Glassy Carbon Conical Crucibles

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

38376	Glassy Carbon Conical Crucible;Vol (ml), 100;Top Dia (mm), 70;Bottom Dia (mm), 34;Ht (mm), 53
39003	Glassy Carbon Conical Crucible;Vol (ml), 10;Top Dia (mm), 31;Bottom Dia (mm), 17;Ht (mm), 27
39007	Glassy Carbon Conical Crucible;Vol (ml), 150;Top Dia (mm), 64;Bottom Dia (mm), 33;Ht (mm), 74
39004	Glassy Carbon Conical Crucible;Vol (ml), 20;Top Dia (mm), 35;Bottom Dia (mm), 18;Ht (mm), 38
39005	Glassy Carbon Conical Crucible;Vol (ml), 30;Top Dia (mm), 44;Bottom Dia (mm), 22;Ht (mm), 45
39006	Glassy Carbon Conical Crucible;Vol (ml), 60;Top Dia (mm), 52;Bottom Dia (mm), 25;Ht (mm), 56

Glassy Carbon Crucibles for Crystal Growth

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

39016	Glassy Carbon Crucible for Crystal Growth;Vol(ml), 25;Top Dia(mm), 19;Bottom Dia(mm), 19;Ht(mm), 140;Bottom Angle, 60°
39017	Glassy Carbon Crucible for Crystal Growth;Vol(ml), 30;Top Dia(mm), 24;Bottom Dia(mm), 19;Ht(mm), 160;Bottom Angle, 30°
39019	Glassy Carbon Crucible for Crystal Growth;Vol(ml), 400;Top Dia(mm), 57;Bottom Dia(mm), 57;Ht(mm), 195;Bottom Angle, 90°
39015	Glassy Carbon Crucible for Crystal Growth;Vol(ml), 7;Top Dia(mm), 14;Bottom Dia(mm), 14;Ht(mm), 100;Bottom Angle, 90°

Glassy Carbon Cylindrical Crucibles

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

39008	Glassy Carbon Cylindrical Crucible;Vol (ml), 10;Dia (mm), 24;Ht (mm), 39
39012	Glassy Carbon Cylindrical Crucible;Vol (ml), 130;Dia (mm), 56;Ht (mm), 85
39014	Glassy Carbon Cylindrical Crucible;Vol (ml), 260;Dia (mm), 73;Ht (mm), 85
39010	Glassy Carbon Cylindrical Crucible;Vol (ml), 30;Dia (mm), 36;Ht (mm), 45
39011	Glassy Carbon Cylindrical Crucible;Vol (ml), 50;Dia (mm), 40;Ht (mm), 56

Glassy Carbon Electron Beam Evaporating Crucibles

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

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No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

40965	Glassy Carbon E-Beam Evaporating Crucible; Vol(ml), 30; Top Dia(mm), 50; Bot Dia(mm), 35; Height(mm), 26; Angle, 15°
40960	Glassy Carbon E-Beam Evaporating Crucible; Vol(ml), 4; Top Dia(mm), 29; Bot Dia(mm), 22; Height(mm), 15; Angle, 15°
40961	Glassy Carbon E-Beam Evaporating Crucible; Vol(ml), 7; Top Dia(mm), 34; Bot Dia(mm), 26; Height(mm), 17; Angle, 15°

Glassy Carbon Evaporating Dishes

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

38372	Glassy Carbon Evaporating Dish;Vol (ml), 100;Top Dia (mm), 108;Bottom Dia (mm), 73;Ht (mm), 27
39029	Glassy Carbon Evaporating Dish;Vol (ml), 20;Top Dia (mm), 47;Bottom Dia (mm), 26;Ht (mm), 22

Glassy Carbon Foam

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

Glassy Carbon Lids

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

39020	Glassy Carbon Lid;Top Dia (mm), 37;Bottom Dia (mm), 23
38377	Glassy Carbon Lid;Top Dia (mm), 92;Bottom Dia (mm), 72
39021	Glassy Carbon Lid;Top Dia (mm), typically 50;Bottom Dia (mm), 36

Glassy Carbon Plates

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

38024	Glassy carbon plate, 1mm (0.04in) thick, type 1
38021	Glassy carbon plate, 1mm (0.04in) thick, type 2
38025	Glassy carbon plate, 2mm (0.08in) thick, type 1
38022	Glassy carbon plate, 2mm (0.08in) thick, type 2
42821	Glassy carbon plate, 3mm (0.1in) thick, type 1
42820	Glassy carbon plate, 3mm (0.1in) thick, type 2
38026	Glassy carbon plate, 4mm (0.16in) thick, type 1
38023	Glassy carbon plate, 4mm (0.16in) thick, type 2

Glassy Carbon Rods

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

38009	Glassy carbon rod, 1mm (0.04in) dia, type 1
37996	Glassy carbon rod, 1mm (0.04in) dia, type 2

38010	Glassy carbon rod, 2mm (0.08in) dia, type 1
37997	Glassy carbon rod, 2mm (0.08in) dia, type 2
42822	Glassy carbon rod, 3mm (0.1in) dia, type 1
42824	Glassy carbon rod, 3mm (0.1in) dia, type 2
42823	Glassy carbon rod, 4mm (0.16in) dia, type 1
42825	Glassy carbon rod, 4mm (0.16in) dia, type 2
38011	Glassy carbon rod, 5mm (0.2in) dia, type 1
37998	Glassy carbon rod, 5mm (0.2in) dia, type 2
45004	Glassy carbon rod, 6mm (0.24in) dia, type 1
45005	Glassy carbon rod, 6mm (0.24in) dia, type 2
38012	Glassy carbon rod, 7mm (0.28in) dia, type 1
37999	Glassy carbon rod, 7mm (0.28in) dia, type 2

Glassy Carbon Spherical Powders

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
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Electrochemistry

38004	Glassy carbon spherical powder, 0.4-12 micron, type 1
38008	Glassy carbon spherical powder, 0.4-12 micron, type 2
43489	Glassy carbon spherical powder, 10-20 micron, type 1
43490	Glassy carbon spherical powder, 10-20 micron, type 2
42130	Glassy carbon spherical powder, 200-400 micron, type 1
42550	Glassy carbon spherical powder, 200-400 micron, type 2
42129	Glassy carbon spherical powder, 400-630 micron, type 1
41481	Glassy carbon spherical powder, 400-630 micron, type 2
41497	Glassy carbon spherical powder, 630-1000 micron, type 1

Glassy Carbon Splinter Powders

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
Protective tubes for thermo-elements and viewing tubes for pyrometers
Shaping tools for the glass industry
Electrochemistry

38001	Glassy carbon splinter powder, 0.4-12 micron, type 1
38007	Glassy carbon splinter powder, 0.4-12 micron, type 2

42518	Glassy carbon splinter powder, 1000-2000 micron, type 1
42519	Glassy carbon splinter powder, 1000-2000 micron, type 2
42514	Glassy carbon splinter powder, 2000-3150 micron, type 1
42515	Glassy carbon splinter powder, 2000-3150 micron, type 2
42811	Glassy carbon splinter powder, 200-400 micron, type 1
42813	Glassy carbon splinter powder, 200-400 micron, type 2
41258	Glassy carbon splinter powder, 20-50 micron, type 1
41259	Glassy carbon splinter powder, 20-50 micron, type 2
42516	Glassy carbon splinter powder, 3150-4000 micron, type 1
42517	Glassy carbon splinter powder, 3150-4000 micron, type 2
42520	Glassy carbon splinter powder, 630-1000 micron, type 1
42521	Glassy carbon splinter powder, 630-1000 micron, type 2
38002	Glassy carbon splinter powder, 80-200 micron, type 1
38013	Glassy carbon splinter powder, 80-200 micron, type 2

Glassy Carbon Tapered Crucibles for Crystal Growth

Glassy carbon, a brittle form of carbon with a randomized structure, has certain specific properties making it appropriate for fields of application outside the scope of carbon types previously known. Glassy carbon offers high purity, corrosion resistance, thermal stability and a structure impermeable to both gases and liquids. Alta Aesar's glassy carbon products are subjected to a high temperature heat treatment which imparts special material properties including significantly improved corrosion resistance and strength. Advantages over more traditional materials are:

Resistance to all wet decomposition agents
No memory effects (uncontrolled adsorption and release of foreign elements)
No contamination of analytical samples
Stability to acid and alkaline melts
No wetting effect of metal melts
Good resistance to thermal shock allows rapid heating and cooling times
Resistive to abrasive wear
Good electrical conductivity

Applications

Vessels for ultra-high purity materials technology, e.g. semiconductor connections and crystalgrowing, e.g. doped halogenide crystals
Crucibles for high-temperature differential thermal/thermal gravimetric analyses
Specimen holders and cuvettes for atomic absorption and atomic emission spectroscopy and multi-element analyses with plasma excitation, e.g. by the ICP method (inductively coupled plasma)
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Shaping tools for the glass industry
Electrochemistry

40955	Glassy Carbon Tapered Crucible for Crystal Growth; Vol(ml), 37; Top Dia(mm), 51; Height(mm), 30