Number	Material	Name	Fixed Carbon % Min.
PIGMENTS			
Channel Blacks - High Color			
7010	High Color - Uncompressed	Neo Spectra Mark II	83
7015	High Color - Beads	Neo Spectra II Beads	83
70C6	High Color - Uncompressed	Carbolac 2	86
70D3	High Color - Uncompressed	Super Spectra Black	92
70L2	High Color - Uncompressed	Neo Spectra Mark III	87
70D5	High Color - Uncompressed	Carbolac 2	86
Channel Blacks - Medium Color			
7020	Med. Color - Uncompressed	Superba Black	90
7025	Med. Color - Beads	Superba Beads	90
70L1	Med. Color - Uncompressed	Monarch 74	93
Channel Blacks - Low Color			
7030	Low Color - Uncompressed	Excelsior Black	94
7035	Low Color - Beads	Raven 11 Beads	94
Furnace Blacks			
7040	Furnace - Uncompressed	Molacco Black	99
70D40	Furnace - Uncompressed	Molacco Black	99
70L8	Furnace - Uncompressed	Vulcan 3R	99
Lamp Blacks			
7050	Lampblack - Neutral	Lampblack M1771	97
7055	Lampblack - Acidic	Lampblack 30	92
70A3	Lampblack - Intermix	Lampblack 30	
70N1	Lampblack - High Color	Blue Tone Lampblack	98
70D50	D.T.A. Lampblack		
70D51	#115 Blue Tone Lampblack		

CLASS 7000

Carbon, black, pure

7000-7019	Carbon, high color
7020-7029	Carbon, medium color
7030-7039	Carbon, low color
7040-7049	Carbon, furnace
7050-7059	Carbon, lamp
7060-7099	Open

Particle Size Angstroms	Oil Absorption S-W 419.1	Moisture Absorbed 70% R.H.	pH	Remarks	Bulk	Number
130	110-190	8-10	3.0	Blue Tone	6.86	7010
130	110-190	8-10		Blue Tone	6.90	7015
120	100-180	8-10	3.0	Brown Tone	6.35	70C6
130	130-200	5-7	3.3	Low Volatile	6.65	70D3
				Restricted - Lowe Bros.	6.86	70L2
120	100-180	8-10	3.0	Brown Tone	6.35	70D5
180	90-130	6-8	3.1		6.65	7020
180	90-130	6-8			6.86	7025
170				Restricted - Lowe Bros.	6.86	70L1
210	70-100	4-6	3.5		6.86	7030
210	70-100	4-6			6.86	7035
700	50-60	1-2	9.0		6.70	7040
700	50-60	1-2	9.0	7040 Intermix	6.70	70D40
250	124	3			6.50	70L8
500	60-80	1-2	9.5		6.70	7050
400	80-120	5-6	3.0		6.74	7055
400	80-120	5-6	3.0	7055 Intermix	6.74	70A3
	50		3.0	Restricted - Newark	6.74	70N1
					6.74	70D50
					6.74	70D51

PASTES (Purchased)

Number	Name	%	Black	%	Resin	#/G	Bulk G/100#
70A2	Pliolite 46S5	40	Lamp	60	Pliolite S5		9.46
70A4	Aquablak G						
70C2	RBH 9002	15	Carbon	15	20 cps Eth.Cel.	8.08	
70C3	RBH P543E230		Carbon				
70C4	RBH 6077	8.5	Carbon	20	½" RS N/C	8.50	
70C5	RBH 5435	10	Carbon	22.6	Vinylite VYHH	7.78	
70C7	DCY Coblak Chip					8.0	
70C8	Aquablak V	15	Channel	85	Water	9.23	
70D4	RBH 1074	7	Carbon	26.8	½" RS N/C	9.2	
70F1	Aquablak M	50	Furnace		(Aq. Dispers.)	11.11	
70F4	Aquablak B	35	Carbon		(Aq. Dispers.)	9.88	
70F8	RBH AN-C-638-E88		Carbon		CAB		
70F10	RBH 6077	8.5	Carbon	20	½" RS N/C	8.50	
70F11	RBH 854	25	Carbon	12.5	½" RS N/C	8.58	
70F12	Pliolite 2C-S5	40	Carbon	60	Pliolite S5		9.4
70F13	RBH 6088	15	Carbon	15	½" RS N/C	8.5	
70L3	Black Lacquer Paste	175				8.08	
70L5	Covarnishblak AR	20	Carbon	80	Terpene Resin	9.50	
70N2	RBH 5405	20	Lamp	12	Vinylite VYHH	8.24	
70P3	RBH 5405	20	Lamp	12	Vinylite VYHH	8.24	
70P4	RBH 5015	5	Carbon	16.6	Vinylite VYHH	7.46	

BASES (Manufactured)

Number	%	Carbon	NVM(Run)	#/G
BB5	8.2	7015		8.02
BB10	17.5	7040	67	8.34
BB915	12	7050	47.5	8.20
BB1203	12	7015		8.00
BB1209	30	7040		8.74
BB1212	24	7055		8.49
BB1310	15.7	7055		8.70
BB1411	6.5	7055		14.59

Remarks

The primary types of carbon pigments produced from hydrocarbons are channel blacks, furnace blacks and lampblacks.

Channel blacks are made by incomplete combustion of natural gas by impingement of the gas flames against metal surfaces and collecting by scraping. Particle size ranges from 50 to 350 Angstroms. The smaller the particle, the greater the jetness, oil absorption, moisture absorption and volatile matter.

All channels are acidic and are therefore easily wet. They absorb driers which must carefully be compensated by additional quantities in formulation. They are hydrophilic and are shipped in moisture-proof containers.

Furnace blacks are produced in a diffusion flame through thermal decomposition of hydrocarbons, either gas, oil or mixtures. These are coarser products with greyer masstone than channels, but have a blue tint. Color uniformity is difficult to maintain. They are the least expensive carbon pigments.

Furnace blacks are neutral and are therefore hard to wet, are hydrophobic and have low absorption power.

Lampblacks are prepared by burning petroleums, tars, asphaltums, etc. in a limited supply of air without impingement. Neutral lampblacks have properties similar to furnace blacks but flood more. They are very uniform in color strength.

Acidic lampblack is prepared in an oxidizing atmosphere and has properties closer to the channels. However, the tint is more blue and the masstone less jet.

Channels - High Color

7010 Desirable for high quality enamels and lacquers, 7010 has the greatest blackness of the channels used, and has a decided blue tone.

7015 The dustless bead form of 7010. Primarily for use in ball mills where it permits higher mill loading and more rapid grinding. However, it gives slightly lower yields.

70C6 A high color channel with a brown tone.

70D3 A high color, low volatile channel prepared by calcination in absence of air, used in automotive lacquers for high jetness and flatness of tone.

70L2 Similar to 7010 but with color intermediate to 7010 and 7020.

Remarks (Con't.)

Channels - Medium Color

7020 A medium color black used in good quality paints, enamels and lacquers.

7025 The beaded form of 7020.

Channels - Low Color

7030 The standard all-purpose black for highly pigmented inexpensive blacks.

7035 The beaded equivalent of 7030.

Furnace Blacks

7040 The cheapest carbon, 7040 is of high strength with a blue tint, but with greyer masstone than channel blacks and is used primarily for tints and enamels. Color uniformity is difficult to maintain. Floods less than 7050.

Lampblacks

7050 Neutral lampblack is somewhat similar in properties to 7040, but color is very uniform and flooding is considerable. Used almost exclusively for tints, it has high strength and blue tint.

7055 Acidic lampblack is similar to the channels, with high color and a blue tint.