

Penn Color offers this range of high performance colors for application in any coating or ink system where transparency, high chroma and durability are required. Based on CAB 531-1, a world standard for this polymer family, these dispersions offer ease of incorporation, broad compatibility, and hydroxyl functionality for use in reactive systems.

## CAB PIGMENT DISPERSIONS

MASSTONE	TINT TONE	PRODUCT CODE	PIGMENT LOADING	DESCRIPTION	C.I. PIGMENT NAME	LIGHT FASTNESS <sup>1</sup>	ALKALI RESISTANCE <sup>2</sup>	ACID RESISTANCE <sup>2</sup>																																																																																																																																						
Black	Grey	78B484CT	33.0%	Jet Black Chip/Paste	PBk 7	8	5	5																																																																																																																																						
		19B200DT	8.25%						Black	Grey	78B550CT	33.0%	Jet Black Chip/Paste	PBk 7	8	5	5	19B202DT	8.25%	Black	Grey	78B658	50.0%	Medium Black Chip	PBk 7	8	5	5	White	White	78W607C	55.0%	Transparent White Chip/Paste	PW6	8	5	5	19W220	22.0%	Red	Pink	78R657	60.0%	Anthraquinone Red Chip/Paste	PR177	8	5	5	19R219	6.0%	Red	Pink	78R655	60.0%	Transparent DPP Red Chip/Paste	PR254	8	5	5	19R217	6.0%	Red	Pink	78R648	60.0%	Perylene Red Chip/Paste	PR224	7-8	4	5	19R216	6.0%	Magenta	Pink	78R659	60.0%	Quinacridone Magenta Chip/Paste	PR122	8	5	5	19R222	6.0%	Red	Pink	78R433C	45.0%	Transparent Red Iron Oxide Chip/Paste	PR101	8	5	5	19R136D	14.0%	Blue	Blue	78S665	60.0%	R/S Phthalocyanine Blue Chip/Paste	PB 15:1	7-8	5	5	19S221	6.0%	Blue	Blue	78S675	60.0%	G/S Phthalocyanine Blue Chip/Paste	PB 15:4	8	5	5	19S229	22.0%	Yellow	Yellow	78Y295C	43.0%	Transparent Yellow Iron Oxide Chip/Paste	PY42	8	5	5	19Y125D	12.5%	Yellow	Yellow	78Y656	60.0%	Isoindolinone Yellow Chip/Paste	PY110	7-8	5	5	19Y218	6.0%	Yellow	Yellow	78Y670	60.0%
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MASSTONE	TINT TONE	PRODUCT CODE	PIGMENT LOADING	DESCRIPTION	C.I. PIGMENT NAME	LIGHT FASTNESS <sup>1</sup>	ALKALI RESISTANCE <sup>2</sup>	ACID RESISTANCE <sup>2</sup>
Yellow	Light Yellow	78Y674	60.0%	Disazo Yellow Chip/Paste	PY155	7-8	5	5
		19Y228	6.0%					
Purple	Light Purple	78S672	60.0%	Carbazole Violet Chip/Paste	PV23	8	5	5
		19S224	5.0%					
Dark Purple	Light Purple	78S586C	45.0%	Perylene Violet Chip/Paste	PV29	7-8	4	5
		19S227	6.0%					

"The performance of Penn Color's dispersions may vary due to the composition and applications of the final products in which they are used. It is therefore essential that they be thoroughly tested in their intended application prior to commercialization. Fitness for use must be determined and verified by the finished product formulator and will not be the liability of Penn Color."

<sup>1</sup> Light Fastness ranges from 1-8 with 8 denoting 'outstanding' and 1 denoting 'poor'. The data is provided by the pigment manufacturer and may vary due to formulation.

<sup>2</sup> Chemical Resistance ranges from 1-5 with 5 denoting 'outstanding' and 1 denoting 'poor'. The data illustrated is provided by the pigment manufacturer and may vary due to formulation.

## PROCEDURE FOR CUTTING CAB CHIPS

The following data outline the recommended method for dissolving CAB chips. Users should note that the rate of chip dissolution is a function of many variables, including solvent selection, system viscosity and temperature conditions. To avoid fusing of chip, do not soak granules in active solvents without some degree of agitation.

### 1. Recommended Solvents

Esters: n-Butyl Acetate, PM Acetate, EB Acetate  
Ketones: Methyl Ethyl Ketone, MIBK, DIBK, Cyclohexanone

### 2. Cutting Time and Conditions

Suggested Test Formula	Chips: 10% Solvents: 90
High Speed Dissolver Cutting Speed (ft/min)	650 ft/min initially; increase to 1300 ft/min as paste thickens
Typical Cutting Time	2-3 hours
Note	(1) No soaking needed. (2) Solvent evaporation will affect solids content.

### 3. High Speed Dissolver Parameters

Target HSD Viscosity	4000 mP·s
Mixer Power Rating	75 hp
Impeller Selection	Impeller with tooth cutting blade
Target Fluid Condition	Laminar flow
Tank Diameter	2.5 - 3.0 x blade diameter
Blade Height (from tank bottom)	0.5 - 1.0 x blade diameter
Batch Depth	1.0 - 2.0 x blade diameter
Impeller Speed Calculation	Impeller Tip Speed (ft/min) = 0.262 x D x RPM (D is the impeller diameter in inches)

