

For over 30 years, Penn Color has been a global leader in the supply of cosmetic grade nitrocellulose pigment dispersions. Offered in both chip and paste, our extensive color pallet provides nail lacquer producers with the tools to design and successfully market hundreds of new colors each year. Clear suspension bases are also available for creating products that contain large particles such as metallic flake or glitter. These pearlescent pigments feature a unique texture and appearance. Beyond our standard line of nitrocellulose products, Penn Color can provide you with customized products in a number of acrylic and energy-curable carrier systems to meet the ever-changing world of fashion and design.

## PROCEDURE FOR CUTTING NITROCELLULOSE CHIPS

The following data outline the recommended method for dissolving nitrocellulose 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** Ethyl Acetate/ Ethyl Alcohol Blends, Isopropanol and n-Butyl Acetate


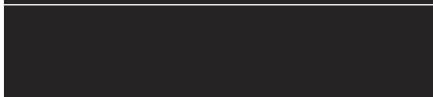

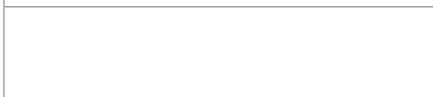








### 2. Cutting Time and Conditions

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)



	PRODUCT CODE	DESCRIPTION
	6B1481	D&C Black #2 Paste
	6B875	Cosmetic Black Oxide Paste
	6W845	Hydrophobically Treated TiO <sub>2</sub> White Paste
	6W1585	Untreated Cosmetic TiO <sub>2</sub> White Paste
	6S1418D	Cosmetic Iron Blue Paste
	6R838D	Cosmetic Red Iron Oxide Paste
	6R1419D	Cosmetic Russet Paste
	6R1338D	D&C Red #6 Paste
	6R1339D	D&C Red #7 Paste
	6R1342D	D&C Red #34 Paste
	6R1311D	D&C Red #30 Paste
	6Y1423D	FD&C Yellow #5 Paste

"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. Penn Color does not make any warranties with respect to the merchantability or fitness for a particular purpose of any samples provided. Fitness for use must be determined and verified by the finished product formulator and will not be the liability of Penn Color. Any samples requested are proprietary to, and contain confidential information of, Penn Color, and should not be analyzed or given to a third party for evaluation."

