

## Introduction

Our extensive nitrocellulose product range is designed to meet current and future application requirements. The company maintains its position at the forefront of the industry by substantial investment in research and development and a commitment to innovation and expertise.

### NITROGEN CONTENT

Nitrogen Class	Nitrogen Content	Typical Application
High (H)	11.7% to 12.2%	Auto Refinish, Wood Lacquers
Medium (M)	11.2% to 11.7%	Printing Inks, Film Coatings
Low (L)	10.7% to 11.2%	Printing Inks

Nitrogen content influences the solubility and thermoplasticity of nitrocellulose. Low nitrogen grades of nitrocellulose have a higher solubility in alcohols and higher thermoplasticity. The selection of proper grade of nitrocellulose will depend on the solvent system and the thermoplasticity requirement.

### VISCOSITY RANGE

Viscosity Class	Measurement
Medium (M)	10 gms in 100 ml of 95% v/v aqueous acetone
Low (L)	20 gms in 100 ml of 95% v/v aqueous acetone
Extra Low (X)	40 gms in 100 ml of 95% v/v aqueous acetone

The viscosity of the grade determines the strength and durability of the nitrocellulose film. Low viscosity grades are suitable for applications where high solids and gloss are primary requirements as in case of printing inks. The high viscosity grades provide better durability and resistance to films as desired in auto refinish paints.

### DAMPING MEDIA

Solvents	Plasticizers
Butyl Alcohol	Di-isobutyl phthalate Epoxidised soyabean oil
Isopropyl Alcohol	Acetyl tri-butyl citrate Di-isononyl phthalate
Ethyl Alcohol	Di-butyl phthalate
Water wet	Octyl di-phenyl phosphate

The damping medium in the nitrocellulose is the wetting agent that acts as a desensitizer.

## Comparative Grades

Euro Norms *	Nitrex Chemicals	Bergerac	Wolff	Green tree
3E		E 250		RS 1300
4E	HH 2-4	E 220		
5E		E 150		RS 300 sec
6E				RS 150 sec
7E	HM 40/60	E 140	E 1160	RS 75 sec
8E	HM 10/25	E 130		RS 35 sec
9E	HL 120-170	E 110	E 950	
10E		E 90		RS 15 sec
11E		E 80		
12E	HL 25-45		E 730	
13E				RS 5 sec
14E				
15E		E 60		
16E		E 40		
17E				
18E				
19E				
20E	HX 70/90			
21E	HX 40/70			
22E		E 35	E 620	
23E	HX 30-50		E 560	RS 1/2 sec
24E	HX 20-30	E 32		
25E			E 510	
26E		E 27	E 400	
27E				
28E	HX 8-13			RS 1/4 sec
30E		E 24		RS 30 cps
31E	HX 5-8			
32E			E 375	
33E		E 20	E 360	
34E	HX 3-5	E 19	E 330	RS 10 cps
37E		E 15		
<b>MEDIUM NITROGEN GRADE (% N = 11.2 to 11.7%)</b>				
17M		E 15	AM 700	
27M		E 15	AM 500	
28M	MX 8-13	E 15		
34M	MX 3-5	E 15	AM 330	
<b>MEDIUM NITROGEN GRADE (% N = 11.2 to 11.7%)</b>				
23A	LX 30-50	A 27	A 600	
24A				SS 1/2"
27A			A 500	
28A	LX 8-13	A 20		SS 1/4"
30A		A 15	A 400	
31A	LX 5-8			
34A	LX 3-5			SS 1/8"