POLYTEX™ NX-55
RESIN SOLUTION
FOR THE COSMETICS INDUSTRY

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THE EDGE OF INNOVATION

GENERAL DESCRIPTION

Polytex NX-55 is a proprietary tosylamide resinous composition used in clear, and pigmented nail enamel preparations to promote adhesion, internal plasticization, gloss, depth of image, and durability.

Polytex NX-55 can be used in conventional air dry and UV/LED curable compositions.

- **Free** of Bisphenol-A
- **Stability** against yellowing and degradation under outdoor or high temperature applications.
- **Outstanding** gloss, depth of Image, durability and plasticization
- **Enhances** compatibility between common resins, plasticizers, pigments and dyes which may otherwise remain incompatible.

The recommended level of usage is 5-15% of the total formulation.

TYPICAL PROPERTIES*

Appearance	Viscous liquid
Color, APHA	150 maximum
Gardner Viscosity	Z – Z_3
Non-Volatile, weight %	73 – 77%
Solvent	Butyl Acetate

* Not to be used for specification purposes

REGULATORY LISTINGS

- Listed with the US Personal Care Products Council (PCPC formerly CTFA).
- **INCI Listing**: tosylamide/epoxy resin
- Compliant with EU 1223/2009/EC.
- Compliant with the US Federal Food, Drug and Cosmetics Act (FFDCA) which exempts the product from TSCA listing.
- Polytex NX-55 is not TSCA listed.

PACKAGING (NET WEIGHT)

500 lb / 226.8 kg in steel drum
44 lb / 20.0 kg in steel pail

PRODUCT AVAILABILITY

This product is commercially available and may require lead time.

STORAGE AND HANDLING

Store closed containers in a dry, cool area and avoid excessive heat. Keep containers away from ignition sources or open flames. Shelf life of unopened containers is one year from date of shipment. See SDS for additional information.

LONG TERM COLOR STABILITY IN A CLEAR LACQUER

COMPARISON BETWEEN POLYTEX E-75 and NX-55

Components	Formula 1	Formula 2
Polytex E-75	**4-12**	**-**
Polytex NX-55	**-**	**4-12**
0.5 sec Nitrocellulose (Nitroquimica)	20	20
Isocryl C-70 (Estron)	1.5-3	1.5-3
Acetyl Tributyl Citrate	5	5
Butyl Acetate	22.5	22.5
Ethyl Acetate	35	35
Isopropyl Alcohol	5	5

Film Characteristics	Formula 1	Formula 2
Drawdown on Glass using #10 spiral rod		
Tack free, time in seconds	50	60
Hardness, 20 min / 40 min / 5 hr	HB / HB / HB	HB / HB / HB
Clarity	Clear	Clear

Color Data (Gardner Scale)	Formula 1	Formula 2
Initial	<1	<1
1 month, room temperature	4-5	<1
1 month, incubated 40°C	5	<1

COMPATIBILITY CHART (% NX-55, solids basis)

PVC	15	Nitrocellulose	100	Acrylics	25	Phenolics	50
Polyvinylacetate	50	Ethylcellulose	75	Casein	25	Alkyd	25
Polyvinylbutyral	50	Cellulose acetate	25	Shellac	25	Melamine	25
Polyvinylidenechloride	25	CAB	50	Polyester	20	Neoprene	50
Polystyrene	10	CAP	50	Epoxy	100	Polyamide	50

Revision Date: August 23, 2018 *TDS Revised by: Chris Miller* *TDS Approved by: Fred Allen*