



Apcotex[®] XNB 300

CHEMICAL DESCRIPTION

Apcotex XNB 300 is a carboxylated butadiene-acrylonitrile copolymer latex used for making thin examination gloves with good tensile strength and elongation by coagulant dipping process.

It is manufactured by employing state-of-the-art emulsion polymerization technology ensuring product consistency.

ADVANTAGES

- Suitable for thin examination gloves (< 0.1 mm)
- High tensile strength and softness
- Fast gelling for good productivity
- Good resistance against oil and chemicals
- Good compound stability

GUIDELINE FORMULATION & PROCESS PARAMETER FOR NITRILE GLOVES

COMPOUNDED LATEX PROPERTIES

1. pH - 9.5 - 9.8
2. % N.V.M.-13%
3. Stirring 24 hours (slow agitation)

Appearance	Milky white pourable emulsion
Emulsifying System	Synthetic anionic
Total Solids (%)	44.0 ± 1.0
pH at 25°C	8.0 ± 1.0
Brookfield Viscosity DV (CPS) SP.1, 60 RPM at 25°C	100 Max.
Surface Tension (Dynes/cm) at 25°C	34.0 ± 3.0
Acrylonitrile Content	Medium
Antioxidant	Yes

STORAGE RECOMMENDATION

Store between temperatures of +5°C and +35°C.

Keep containers closed when not in use.

Protect from freezing and direct exposure to sunlight.

Chemical	Phr
Nitrile Latex	100
KOH (3%)	0.8
Sulphur	1.1
Zinc Oxide	1.5
ZDEC	0.6
ZDBC	0.3
TiO ₂	1.2

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Disclaimer : These suggestions and data are based on information that we believe to be reliable. They are given for information only and in good faith, but conditions and methods of use of our products are beyond our control. Apcotex recommends that the user determine the suitability of our materials and suggestions before using them on a commercial scale

PROCESS PARAMETERS AND DIPPING PROCEDURE

Sl. No.	Steps	Parameters	Conditions
1	Former Conditioning	Oven Temperature	70 °C
2	Coagulant Dipping	Coagulant Temperature	60 °C
		Dwell Time	12 sec.
3	Drying	Oven Temperature	70 °C
		Time	2 min
4	Latex Dipping	Dwell Time (Double Dipping)	6 sec X 2 times (After 1 st dip wait for 30 sec & perform the 2 nd dip)
5	Drying	Temperature	80 °C
		Time	3 min
6	Pre-Leaching	Temperature	60 °C
		Time	2 min
7	Beading	Time	After 1 min of Pre-leaching
8	Polymer Coating	Polymer Concentration	3 %
		Dwell Time	6 sec (Dipping)
9	Curing	Temperature	115 °C
		Time	25 min
10	Post Leaching	Temperature	60 °C
		Time	1 min
11	Stripping	Temperature	At ambient temperature

MECHANICAL PROPERTIES OF GLOVES

- Test Method: ASTM D 412, EN-455-2
- Glove weight- 2.7 g
- Thickness in mm-0.05-0.06 (2-2.5 mil)

Tensile Strength (MPa)		% Elongation		300% Modulus		EN-455-2 (N)	
Unaged	Aged	Unaged	Aged	Unaged	Aged	Unaged	Aged
32 ± 2	33 ± 2	590 ± 20	480 ± 20	4.8 ± 1	7.8 ± 1	6.8 ± 0.5	7.1 ± 0.5

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