

TekLeu® PNPa 700**Partially Neutralized Polyacrylate**

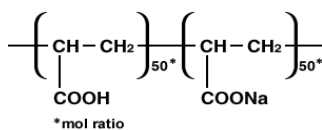
Technical Information

Update: 01/01/2021 Version 1.0

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**Partially Neutralized Polyacrylate (TekLeu® PNPa 700)**

TekLeu® PNPa 700 is a water-soluble polymer synthesized from acrylic acid. It has a straight chain structure, giving it stringing properties

Molecule Structure

CAS# 9033-79-8

Physical properties

Standard	JP; Enterprise Standard
Appearance	White powder, almost insoluble in ethanol or ether, slowly dissolves into a thick liquid when dispersed with water
pH	5.5-7.5
Alkali	Doesn't produce red
Sulphate	≤0.490%
Heavy metal	≤20ppm
Arsenic salt	≤0.00015%
Residual acrylic monomer	≤1%
Low polymer	≤5%
Loss on drying	≤5%
Residue on ignition	30.0-55.0%
Content determination/sodium	10-19%
Viscosity(0.2% ap. Sol.)	530mPa.s (350-750mPa.s)
Neutralization degree (molar ratio)	50%

This product's indications for pharmaceutical purposes are limited to general external and transcutaneous applications. It is not indicated for use in preparations for dermal injury;

■ **Industrial thickener applications:**

By adding TekLeu® PNPa 700 to emulsion latex, the resulting liquid is given a certain thickness and viscosity. As a result of the thickness and viscosity conferred by adding PNPa 700, liquids can be spread evenly and uniformly across surfaces with complex shapes.

Applications

■ **Medical applications:**

After dispersing TekLeu® PNPa 700 onto a moistening agent such as glycerin, adding water, and kneading together with the crosslinking agents of aluminum compounds and organic acids, an aqueous gel raw material sol is formed. As a subsequent cross-linking reaction proceeds, the suspension forms into a gel. This technique has a variety of applications, including in pharmaceutical cataplasms (poultices), cooling patch, and medical devices.

■ **Cosmetic Materials:**

It could be used as thickeners in emulsions, creams, lotions, tonics, and other cosmetic products. We are able to formulate hydrous gels into sheet-shaped packs by combining different sodium polyacrylates and cross-linkers.

■ **Water Solubility;**

■ **Adhesion;**

■ **It is heat stable in its powder form, exposed to a temperature of 120 °C**

Features & Benefits

■ **Huge molecular weight;**

■ **Anionic (negatively-charged ion) & Thicking Properties.** Due to ion repulsion between these negative ions, the molecules extend into straight chains, which is the source of its thickening properties.

Store in a dry and tightly sealed container;

Storage & Handling

Packing: 1kg Aluminum bag/ 5kg drum/ 20kg drum;

Safety

Safety Data Sheet has been compiled for Partially Neutralized Polyacrylate that contains up-to-date information on questions relevant to safety.

Note:

The data are controlled at regular intervals as part of our quality assurance program. Neither these data nor the properties of product specimens shall imply any legally binding guarantee of certain properties or of fitness for a specific purpose. No ability of ours can be derived therefrom.