

# Acid soluble, solvent soluble grade PR-X23099

## ● Characteristic

- ✓ Cationic type applicable in acid solution
- ✓ High solubility in various solvents
- ✓ Low viscosity and easy to handle

## ● Resin property

| Item                    | PR-X23099 |
|-------------------------|-----------|
| Ion                     | Cation    |
| Free phenol %           | <0.1      |
| Free formaldehyde %     | <0.1      |
| Ash content %           | 0         |
| Viscosity mPa·s,25°C    | 160       |
| Gelation time Sec/165°C | 320       |
| Resin content %/135°C   | 49        |
| pH -/25°C               | 5.4       |
| Fixed carbon %/800°C    | 16        |

## ● Viscosity & Solvent Solubility

### Viscosity

| Grade            | Viscosity<br>mPas/25°C |
|------------------|------------------------|
| PR-56449         | 770                    |
| PR-X23115        | 400                    |
| PR-56451         | 3000                   |
| <b>PR-X23099</b> | <b>160</b>             |

### Solubility

| Solvent   | PR-X23099 |
|---|-----------|
| Distilled water   | ◎         |
| 7.5% H <sub>3</sub> PO <sub>4</sub><br>aqueous solution | ◎         |
| Ethanol   | ◎         |
| Acetone   | ○         |
| Propyleneglycol<br>monomethylether                      | ◎         |

◎ :Over 5 times, ○:Over 1 times,

| Grade  | PR-56367 | PR-56449 | PR-56451H | PR-56451 | PR-X23099 |
|--|----------|----------|-----------|----------|-----------|
| Distilled water                                      | ◎        | ◎        | ◎         | ◎        | ◎         |
| 5% NaOH aqueous solution                             | ◎        | ◎        | ◎         | ◎        | ×         |
| 7.5% H <sub>3</sub> PO <sub>4</sub> aqueous solution | ×        | ×        | ×         | ×        | ◎         |
| Methanol   | ◎        | ×        | ×         | ×        | ◎         |
| Ethanol  | ◎        | ×        | ×         | ×        | ◎         |
| IPA  | ×        | ×        | ×         | ×        | ○         |
| Butanol  | ×        | ×        | ×         | ×        | ○         |
| Acetone  | ○        | ○        | ○         | ○        | ○         |
| MEK  | ○        | ×        | ×         | ×        | ×         |
| Propyleneglycol monomethylether                      | ◎        | ○        | ○         | ◎        | ◎         |

◎ : Over 5 times, ○ : Over 1 time, × : Insoluble