

# FB-209 BT57

## Description

FB-209 BT57 is heat-reactive phenolic resin in solution.

## General Product Data

### Product Characteristics:

Appearance	clear
Solid content, %	56 - 59
Viscosity at 23 °C, mPa.s	340 - 490
Color, Gardner	0 - 4

Tests methods are available upon request.

### Typical Properties:

Form	Liquid
Solvent system	n-Butanol/Toluene

### Solubility – Compatibility:

Xylene	complete
Toluene	complete
Aromatic Solvent 150	complete
n-Butyl acetate	complete
Butyl glycol	complete
Low boiling alcohols	limited

Epoxy resin type 4/7	complete
Epoxy resin type 9	max 30%
Saturated polyester resins	max 20%

## Application

The main application of FB-209 BT57 is in metal can coatings for internal protective layers and in general industry where chemical and anti-corrosion resistance is required. Compatible with epoxy resins type 4, 7 or 9 and saturated polyesters, FB-209 BT57 resin is used for heat cured phenolic/epoxy systems where good chemical resistance, light color, and hardness are needed.

To get optimum properties FB-209 BT57 should be combined with epoxy resins: phenolic/epoxy ratio from 10/90 to 40/60 (solids on solids). The stoving temperature ranges from 180 – 220 °C. Small amount of phosphoric acid catalyst is helpful for the optimum cure.

### Typical Starting Formulation

Material	Weight parts
FB-209 BT57	180
Epoxy 9 solution (a)	770
Slipping agent	21
Phosphoric acid	2
Thinner (b)	177

#### (a) Epoxy 9 solution:

Epoxy resin 9	308
Propylene glycol monoethylether	308
n-Butanol	38
Diacetone Alcohol <sup>1</sup>	77
Isophorone	39

<sup>1</sup> SI Group product

#### (b) Thinner solution:

Butyl Acetate	5
Propylene Glycol Monoethylether	25
Aromatic solvent 150	35
Butyl Glycol	15
Methyl Iso Butyl Ketone	15
n-Butanol	5

### Typical Performance (Stoving 15 min @ 200 °C)

MEK resistance (double rubs)	>100
Sterilization resistance (90 min – 129 °C - acid conditions)	pass

Good mechanical, chemical and sterilization properties.

## Storage and Shelf Life

The resin should be kept in the original, unopened and undamaged containers in a dry place at storage temperatures between 5 °C and 30 °C. Exposure to direct sunlight should be avoided.

Under the above-mentioned storage conditions the shelf life of the resin will be 12 months at 23 °C after manufacturing date. The shelf life of the resin can be extended under cooled storage conditions.

As with all phenolic resins, FB-209 BT57 tends to darken over time, which is a normal occurrence.

## Packaging

FB-209 BT57 is packaged in 200 kg metal drums.

## Safety and Regulatory Information

For a current Safety Data Sheet (SDS) please, contact  
SI Group, Inc. at [sds.info@siigroup.com](mailto:sds.info@siigroup.com)