

# Technical Data Sheet

## X-55 Accelerator

### Description

Resin Research developed X-55 accelerator early in our history, over 30 years ago this low toxicity accelerator has shortened cycle times in a myriad of production scenarios. First developed before the chemistry to make faster reacting hardeners this chemistry originally added to our 2100S hardener made production possible in colder climates and made faster production possible in summer. With faster reacting hardeners X-55 is not as necessary as it once was but in cold climates and in production that requires accelerated cycle times it still finds use. Mix amounts vary from 2-4% of the resin/hardener total mixture.

### Typical Applications

- Faster production in cold climates
- Faster production cycles in general
- Faster cycles in time sensitive applications

### Storage Life

At least 24 months from the date of manufacture in the original sealed container at ambient temperature. Store away from heat and excessive humidity in tightly closed containers.

### Handling Precautions

Refer to the Material Safety Data Sheet

### Typical Properties

In Combination with RR 2040 epoxy resin  
Appearance: clear liquid  
Color (Gardner) 1 - 2  
Viscosity 1.70 cps  
Specific Gravity @ 77 °F 1 kg per L  
Density @ 77 °F 1  
Flash Point (closed cup) (°F) NA  
Recommended Mix Ratio: 3-6% mix by volume with epoxy/hardener mixture

### Typical Handling Properties

Gel Time (130g mix @ 77 °F) (min)  
15 Minutes - Fast Hardener  
30 Minutes - Slow Hardener  
Thin Film Set Time  
@ 77 °F (hr) 1 Fast - 3 Slow  
@ 57 °F (hr) 4 Fast - 10 Slow  
Peak Exotherm (100g mix @ 77 °F)  
Fast 210F Slow 190F 22 Fast - 48 Slow  
Use Level: 3 - 6% of epoxy/hardener mixture

### Typical Performance

Reacted polymer:  
(7 day cure @ 77 °F)  
Heat Deflection Temperature (°F) 125  
Tensile Strength (psi) 9500  
Tensile Modulus 398,000  
Tensile Elongation (%) 4.3  
Flexural Strength (psi) 14,400  
Flexural Modulus 470,000  
Hardness (Shore D) 83  
Compression Yield 15,200

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