



## Technical Data Sheet

# Arclin® 5440

### GENERAL DESCRIPTION

Arclin® 5440 is an aqueous solution of phenol formaldehyde (PF) resin. The resin has been commercially demonstrated to have both excellent dryout resistance characteristics as well as good bonding speed and veneer moisture tolerance properties. When recommended adhesive application rates are maintained and the gluing process is properly controlled, Arclin® 5440 will produce a final bond that is highly resistant to heat, moisture, and chemical degradation.

### PERFORMANCE STANDARDS

Arclin® 5440 is a 45% solids resin designed for use in engineered wood products and third party tested and demonstrated to meet the following adhesive standards:

ASTM D2559	(Douglas-fir and Southern Yellow Pine)
ASTM D7247	Tested according to the criteria specified in ASTM D5456
CSA O112.10-08	Evaluation Listing CCMC 13533-L
CSA O112.9	Evaluation Listing CCMC 13533-L

Arclin® 5440 also meets the bond quality requirements of the following product standards:

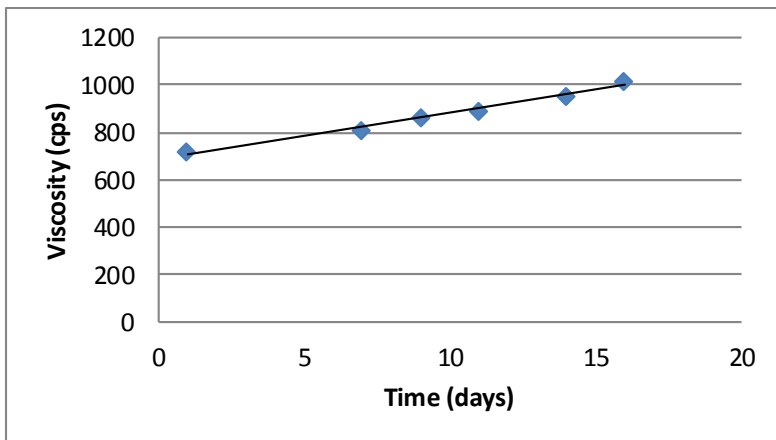
ASTM D5456-12	Standard Specification for Evaluation of Structural Composite Lumber Products
Voluntary Product Standard: PS 1-09	Structural Plywood
CSA O121-08 (R2013)	Douglas Fir Plywood (DFP)
CSA O151-09	Canadian Softwood Plywood (CSP)
CSA O153-13	Poplar Plywood
JAS 233	Structural Plywood
CE (EN 13986 & EN 636-3)	Wood-based panels for use in construction – Characteristics, evaluation of conformity and marking

## **PROPERTIES & CHARACTERISTICS**

Chemical/Physical Property	Formulation Mid-Point	Specification Range
% Non-Volatile Solids	45.0%	44.0 – 46.0%
Brookfield Viscosity, 25°C	875 cps	600 – 1150 cps
% Free Formaldehyde	N/A	< 0.1%
pH, 25°C	12.2 – 13.2	
Specific Gravity, 25°C	1.19 – 1.23	
Water Dilutability	Infinite	
Storage Life, 25°C	14 days (maximum)	

Note: Physical and chemical properties can be adjusted as necessary to suit individual customer preferences, requirements, and specifications and to accommodate seasonal weather changes & ambient plant temperature shifts.

## **RESIN VISCOSITY STABILITY @ 25°C**



Arclin® 5440 has 14 days (maximum) useful storage life depending on the temperature at which it is stored and the extent it is kept agitated. Storage at high temperatures ( $\geq 30^{\circ}\text{C}$ ) without agitation results in the highest rate of viscosity advancement and a correspondingly shorter useful storage life. Additional viscosity stability curves can be supplied for other temperatures upon request.

## **SHIPPING, HANDLING, AND STORAGE**

Arclin® 5440 is generally shipped in truckload quantities. It can be safely transported through and stored in mild or stainless steel transfer lines and storage tanks. The resin should be stored and used in areas having good ventilation. Proper personal protective equipment (for example rubber gloves and safety glasses/goggles/face shield) should be worn whenever the resin is handled. In case of skin contact, wash thoroughly with soap and water. In case of eye contact, immediately flush the eyes with water for at least 15 minutes and contact a physician.

### DISCLAIMER

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