

Grade A-91 is a version of A-90 with increased reactivity with isocyanate and is therefore ideal for improving both the initial and final strength, as well as the heat resistance of two-part adhesives that also use isocyanate. This grade is widely used in shoe manufacturing and conveyor belts.

A-90S is A-90 with a lighter color.

The DCR-15 series represents direct-dissolving, high-viscosity type that retains the superior brushability of the A series.

Table-3 Features of DENKA Chloroprene for Adhesive Applications

Grade	Crystallization Rate	Mooney Viscosity (MS2+2.5)	Solution Viscosity	Features	
General grades	Fast	A-30	20±3	Low viscosity	
		A-70	40±3	↑	
		A-90	48±4	For general adhesive applications	
		A-100	57±5	↓	
		A-120	67±5	High viscosity	
	A-400		500-1,500	Extremely high viscosity	
	Medium	M-40	48±5 ^{***}		Low viscosity
		M-100	100±10 ^{***}		For general adhesive applications
		M-130L		1,000-1,500 ^{**}	High initial strength, long tack retention time, high viscosity
M-130H			1,510-2,700 ^{**}		
Special grades	Fast	A-90S	48±4	Light color chip, high solution transparency	
		A-91	48±4	High reactivity with isocyanate	
		DCR-11	> 80 ^{***}	High thixotropy	
		DCR-15L		1,510-2,700 ^{**}	High viscosity
	DCR-15H		2,710-4,000 ^{**}	Low solid content	
	DCR-25	Medium		2,710-5,000 ^{**}	High initial strength, high viscosity

Note : * 5% Tol solution viscosity (mPa·s) at 20°C

** 10% Tol solution viscosity (mPa·s) at 20°C

*** Mooney viscosity (ML 1+4) at 100°C

Fig-2 DENKA Chloroprene Product Family for Adhesives Application

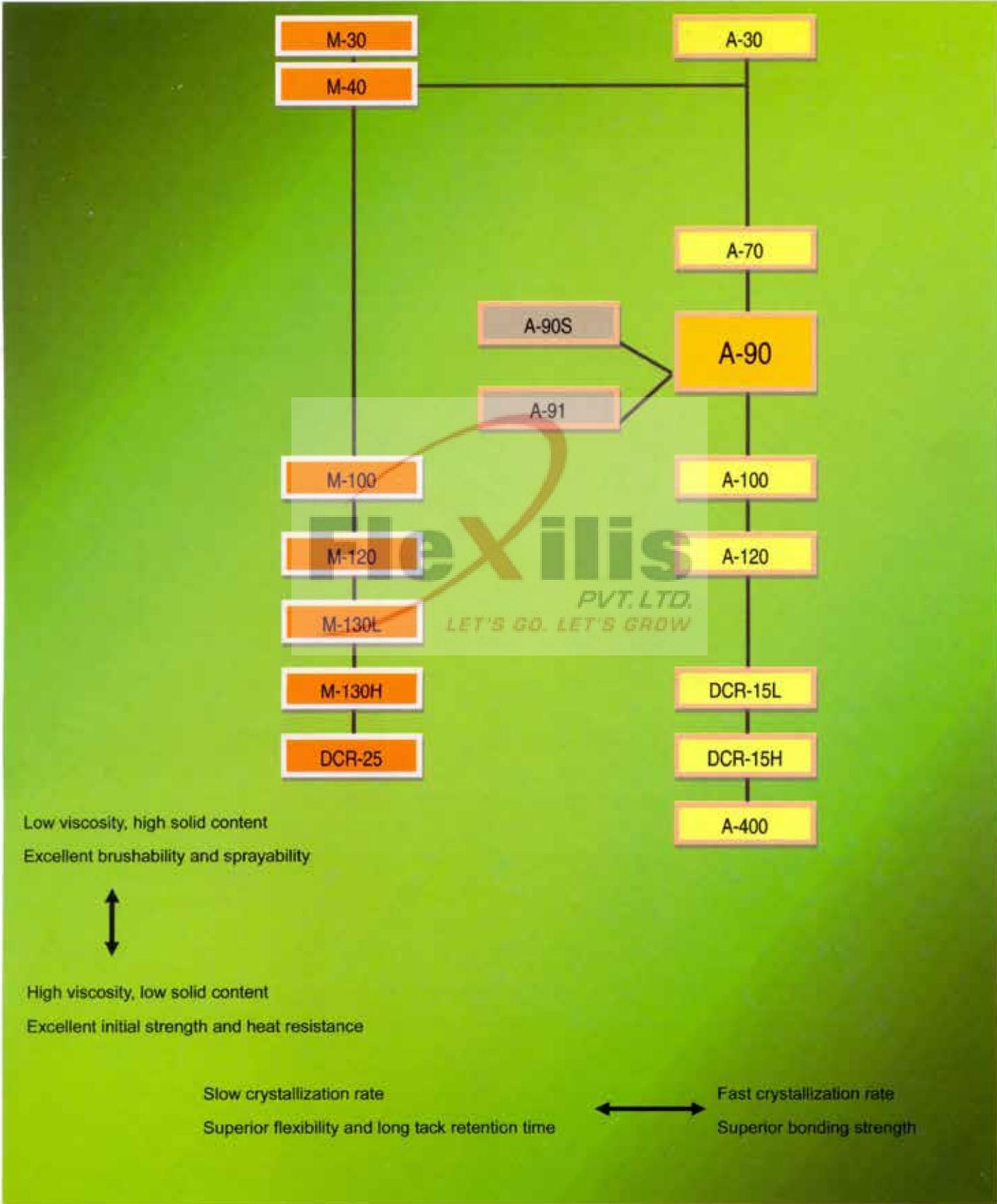


Table-1 DENKA Chloroprene for Industrial Applications

Grade	Crystallization Rate	Mooney Viscosity ML1+4@100°C	Typical Applications / Properties
M-30	Medium	38±4	General purpose, low-viscosity version of M-40
M-40	Medium	48±5	General purpose, cables, belts, hoses, other industrial articles
M-41	Medium	48±5	General purpose, version of M-40 with less roll sticking and mold contamination
M-100	Medium	100±10	General industrial articles (for high loading)
M-120	Medium	120±10	Sheets, packings, hoses, other industrial articles (for high loading)
S-40	Slow	48±5	General industrial articles/products requiring low-temperature resistance
S-41	Slow	48±5	General industrial articles, version of S-40 with less roll sticking and mold contamination
S-40V	Very slow	48±5	General industrial articles/products requiring better low-temperature resistance than S-40, less roll sticking and mold contamination
EM-40	Medium	48±5	Calendered sheets, extruded products, and sponge products with complex shapes
ES-70	Very slow	75±5	Calendered sheets, extruded products, and sponge products with complex shapes, requiring low-temperature resistance (for high loading)
MT-40	Medium	48±5	Calendered sheets and extruded products with excellent balance between extrusion characteristics and mechanical strength
PM-40NS	Medium	50±10*	Sulfur-modified type, for non-discoloring or non-staining articles, suitable for belts, sponges, wire coating, and vibration insulator
PS-40A	Slow	30-55*	Sulfur-modified type, with improved low-temperature resistance, suitable for belts, sponges, wire coating, and vibration insulator
DCR-30	Very slow	120±10	General industrial articles/products requiring low-temperature resistance (for high loading)
DCR-31	Very slow	80±10	Same purpose as DCR-30 (for high loading)
DCR-34	Slow	65±7	General industrial articles, with high heat resistance and mechanical strength
DCR-35	Extremely slow	65±7	General industrial articles/products requiring low-temperature resistance (for high loading)
DCR-36	Very slow	80±10	General industrial articles, suitable for applications requiring low-temperature resistance and injection molding
DCR-40	Slow	40-55*	Sulfur-modified type, suitable for belts, sponges, and molded articles
DCR-40A	Slow	35-50*	Sulfur-modified type, with improved heat resistance and storage stability
DCR-42A	Medium	40-55	Xanthate-modified type, high strength and high loading, suitable for cables and hoses
DCR-48	Medium	40-60*	Sulfur-modified type, version PM-40NS with faster vulcanization speed
DCR-49	Medium	40-60*	Sulfur-modified type, suitable for sponges
DCR-66	Very slow	70±10	Xanthate-modified type, high strength and high loading, excellent low-temperature resistance
DCR-70	Extremely slow	40±4	Low-viscosity version of DCR-35
DCR-105	Slow	35-50*	Sulfur-modified type, improved heat resistance, low-temperature resistance, and storage stability

* at production