

Switchgears

Powered by **Araldite®** casting systems

General requirements for casting systems for switchgear parts are:

- medium to high glass transition temperature (Tg)
- Tg adjusted to service temperature (e.g. service temperature 105 °C requires Tg > 115 °C)
- high resistance to mechanical creeping because of gas pressure in GIS parts

For outdoor applications especially good and proven weathering resistance is required. Araldite® cycloaliphatic outdoor systems are backed by 40 years of service experiences. Araldite® HCEP systems reduce leakage currents and therefore further improve reliability and extend life expectancy of insulators.

In order to increase productivity, Araldite® NPC systems have been developed, which do not require post cure anymore.



> Araldite® HCEP outdoor systems for the embedded pole OP1. By courtesy of ABB Germany



> Araldite® HCEP systems for outdoor Load Break Switch. By courtesy of Entec Korea

Applications

- Indoor Systems for Medium and High Voltage
- Outdoor Systems for Medium Voltage

Adhesives
Cast resin distribution transformers
Electro composites
Generators and motors
Instrument transformers
Insulators & bushings
Switchgears



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Product Name	Mix Ratio	Tg	K _{IC}	Manufacturing Process	Main Features	Type
Unit	pbw	°C	MPa√m			
Araldite® CW 229 / Aradur® HW 229	100 / 100	115	2.9	Automatic pressure gelation / Vacuum casting	Wollastonite prefilled system, low thermal expansion coefficient, high crack resistance, moderate reactivity, best suited for vacuum casting, UL 746 B recognition for 200°C service temperature.	Indoor system for MV
Araldite® CY 228 / Aradur® HY 918 / Flexibilizer DY 040 / Accelerator DY 062 / Filler Silica	100 / 85 / 0.8 / 345	115	2	Automatic pressure gelation / Vacuum casting	High mechanical and electrical properties, good thermal shock resistance, high filler content possible.	Indoor system for MV
Araldite® B 41 / Aradur® HT 903 / Silica Flour	100 / 40 / 210	105	2.3	Vacuum casting	Toughened system with high mechanical properties and excellent thermal shock resistance.	Indoor system for MV
Araldite® CW 5895 / Aradur® HW 5896 /	100 / 80 / 270	130	2.2	Automatic pressure gelation	Liquid toughened system especially good for High voltage GIS spacer application.	Indoor system for HV
Araldite® CY 5995 / Aradur® HY 925 / Filler Al ₂ O ₃	100 / 87 / 400	120	2.3	Automatic pressure gelation / Vacuum casting	No post cure grade of Araldite® CW 229 / Aradur® HW 229, UL 746 B recognition for 200°C service temperature.	Indoor system for HV
Araldite® CW 229 NPC / Aradur® HW 229 NPC	100 / 100	115	2.9	Automatic pressure gelation	No post cure grade of Araldite® CW 229 / Aradur® HW 229, UL 746 B recognition for 200°C service temperature.	Indoor NPC system
Resin XB 5992 / Hardener XB 5993 / Filler Silica	100 / 90 / 350	107	2.1	Automatic pressure gelation / Vacuum casting	No post cure after demolding, good thermal cycling resistance, saving processing cost.	Indoor NPC system
Araldite® CW 5957 / Aradur® HW 5958	100 / 100	110	2.5	Automatic pressure gelation / Vacuum casting	Hydrophobic pre-filled cycloaliphatic system, improved crack resistance, hydrophobicity transfer and recovery, extended insulator lifetime.	Outdoor systems for MV
Araldite® CW 5908 / Aradur® HW 5909	100 / 100	120	2.3	Automatic pressure gelation / Vacuum casting	High thermal shock resistance combined with high Tg for outdoor MV and heavy power electrical industry.	Outdoor systems for MV
Araldite® CY 5622 / Aradur® HY 1235 / Accelerator DY 062 / Filler Silica-EST	100 / 82 / 0.45 / 355	110	2.5	Automatic pressure gelation / Vacuum casting	Hydrophobic cycloaliphatic system with liquid hardener, excellent thermal cycle resistance, hydrophobicity transfer and recovery, extended insulator lifetime, utility approvals.	Outdoor systems for MV
Araldite® CY 184 / Aradur® HY 1235 / Accelerator DY 062 / Filler Silica-EST	100 / 90 / 0.6 / 370	110	2.5	Automatic pressure gelation / Vacuum casting	Long experience, liquid hardener, also used in severe indoor conditions (pollution humidity), EDF approved (HN-26-E-20).	Outdoor systems for MV

More detailed information about these products can be found on our website : www.huntsman.com/power
For any other information, please send an e-mail to : power@huntsman.com

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