

**NIC COMPONENTS CORP.**

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www.niccomp.com / Technical Inquiries: tpmg@niccomp.com**COMPONENT CLEANING****PRODUCTS: ALUMINUM ELECTROLYTIC CAPACITORS**

CLEANING AGENT	CLEANING CONDITIONS	MAXIMUM CLEANING TEMPERATURE
Pine Alpha ST-100S Clean Through 750H, 750L, 710M Sanelek B-12 Aqua Cleaner 210SEP Techno Care FRW 14~17 Isopropyl Alcohol DI Water Wash	Immersion, Ultrasonic, Vapor, Spraying Or Other Method Total Duration: Less Than 5 Minutes.	+60°C
CFC Substitutes: AK-255AES All Others **	Immersion, Ultrasonic, Vapor, Spraying Or Other Method Total Duration: <ul style="list-style-type: none"> - SMT Types: 2 Minutes Maximum - Leaded Ultra-miniature* Sizes: 2 Minutes Maximum - Leaded Standard Sizes: 5 Minutes Maximum 	+40°C

* - NIC Ultra-miniature Series: NSR, NRE-S, NRE-SW, NSRW, NLE, NLE-S, NRE-SN, NRE-SX, NSRZ and NSRN

** - Please review compatibility of all other CFC substitute cleaning solvents with NIC technical team: tpmg@niccomp.com

NOTES:

1. The following solvents **cannot be used**, as they could damage the components
 - Halogenated solvents; (*potential for component failure due to electrical corrosion*)
 - Alkali based solvents; (*potential for dissolution of aluminum case, as aluminum is weak against alkali*)
 - Petroleum based solvents; (*potential for rubber seal material deterioration and component failure*)
 - Xylene; (*potential for rubber seal material deterioration and component failure*)
 - Acetone; (*potential for damage to sleeve and removal of ink markings*)
 - Chlorinated Solvents (*source: <http://www.hsia.org> & <http://www.eurochlor.org>*)
 - Methylene Chloride (Dichloromethane)
 - Perchloroethylene
 - Trichloroethylene
 - 1,1,1-Trichloroethane (*legislated phase-out of 1,1,1-trichloroethane occurred in many countries in 1995*)
 - Bromide Based Solvents
 - n-propyl bromide (alternative for traditional chlorinated solvents)
 - Leksol™
 - Solvon™
 - 1-Bromopropane
2. **Chlorine free** flux, adhesives, sealants must be used.
3. Care should be taken when water washing under pressure, to minimize shrinking or swelling of the PET sleeve on leaded components
4. Please ensure to **review cleaning method(s)** of **high voltage** ($\geq 160\text{VDC}$) rated series, and also **low ESR** leaded type product series (i.e. NRSJ, NRSJG, NRSJH, NRSJK) with NIC to assure compatibility

Please review cleaning with all other solvents and conditions with NIC TPMG. / Contact: tpmg@niccomp.com