SolderKing assembly materials ltd

Technical Data Sheet
SK C1-22

Biodegradable Saponification Cleaning Solution

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Description

SK C1-22 is an ozone friendly, aqueous based saponification cleaning solution used for efficient cleaning of electronic assemblies and general degreasing operations. A non flammable formulation which is suitable for manual and automated ultrasonic or spray-under-immersion cleaning methods, SK C1-22 easily removes post soldering residues from rosin / resin and no-clean type fluxes following wave and hand assembly operations. SK C1-22 is suitable for assemblies which do not contain sensitive substrates or metals. Formulated as a blend of water, biodegradable solvent and basic neutralising agent which is designed to quickly eliminate acidic flux residues with a capability of absorbing over 15% the weight of the cleaner of resinous / flux solids. Due to the active amine neutralizing agent, extended soak times allow SK C1-22 to be used for micro-etching applications which require both a slight chemical abrasion and excellent cleanliness prior to plating by generating an improved surface for good plating results. SK C1-22 contains a useful staged colour indicator system, offering the user a quick visual method to determine the condition of the cleaning solution. Traditional conductivity control methods can also be utilized. SK C1-22 is typically used in staged cleaning equipment which involves an initial 3-5 minutes of agitation at 20 - 45°C followed by a tap water rinse then deionized water rinse and drying process.

Typical properties for SK C1-22

Appearance	Pale Blue Liquid
RoHS-2 (2011/65/EU)	Compliant
Boiling Point	98°C
Freezing Point	-5°C
Conductivity 18°C	1.14 mS
Density at 20°C	1.003
pH	11.6
Viscosity at 20°C	5-10 mPa s
Flash Point	None

Benefits

- Water-based, non-flammable
- No dilution required, ready to use
- Exceptional cleanliness achieved to military standards (J-STD001B)
- Non offensive odour
- Quick removal of rosin and resin flux
- Effective neutralisation of acidic no-clean fluxes
- Low temperature cleaning
- Compatible with Solderking's range of Lead Free soldering materials

Control of SK C1-22

SK C1-22 can be controlled using conductivity, pH and standard titration methods by determining the point where cleaning is no longer to the required standard. As a rule, drag over from the cleaning tank to the rinse tank, and replenishment of the losses from the cleaning stage often result in a long life of the cleaning solution.

pH 11.6—7.6

pH 6

To assist with controlling the cleaning life for SK C1-22, a visual indicator based on pH has been added. Starting as a pale blue colour between pH 11.6—7.6 this then changes to a pale green colour and finally yellow at pH 6. This equates to a near 15% by weight loading of a halide free rosin based flux. Care should be taken to determine the suitability of this control method for your individual process requirements.