

## SCS-18-44

Saponification Cleaning Solution



Ozone Friendly, Biodegradable Cleaning

### Description

Surf Clean SCS-18-44 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 batch cleaning methods, SCS-18-44 easily removes post soldering residues from rosin / resin and no-clean type fluxes following wave soldering, reflow soldering and hand assembly. SCS-18-44 is suitable for assemblies which do not contain sensitive substrates or metals. SCS-18-44 is a formulated blend of water, biodegradable solvent and basic neutralising agent 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 SCS 18-44 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. SCS-18-44 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.

### 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 Warton Metals range of Nexus Lead Free range of soldering materials
- Ozone friendly and biodegradable



### Availability

SCS-18-44 is available in 205 Litre, 25 Litre, 10 Litre, 5 Litre 1 Litre and 0.5 Litre bottles. Warton Metals manufacture all Surf Clean cleaning solutions in the UK. Custom packaging and modifications are available on request.

## Properties - SCS-18-44

Typical properties for Surf Clean SCS-18-44

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
Shelf Life	4 Years

## Directions for Use

SCS-18-44 has been formulated for use in staged cleaning systems which utilize either Ultrasonic or spray-under-immersion agitation in the first stage followed by a tap water rinse tank and a deionised rinse tank before a drying stage.

### Stage 1 - Cleaning

3-5 minutes with agitation using temperatures between ambient and 45 °C

### Stage 2—Tap water rinse

Agitation with warm water will accelerate speed of rinsing

### Stage 3 - Deionised water rinse

For improved cleanliness a one-use spray method is preferred, however a re-circulating system can provide exceptional cleanliness with adequate replenishment.

### Stage 4 - Drying

5 minutes at 90°C using a high air flow system usually provides adequate drying depending on

## Control of SCS-18-44

SCS-18-44 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 SCS-18-44, 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 requirements.