



# SODACLEAN™

## Alkaline Cleaner Technical Information Sheet

### Description & Application:

Sodaclean is a superior blend of alkaline metal hydroxides with complexing, sequestering and surface active agents to give a superior, non-foaming, heavy duty alkaline immersion cleaner suitable for ferrous and titanium based metal surfaces.

The cleaner is supplied as a liquid concentrate and is formulated to be applied by dip application process.

Primary features attributable to Sodaclean are:

- Low foaming;
- Suitable for all ferrous and titanium metal substrates
- Liquid concentrate for easier handling, concentrate is v stable (>2 yrs).
- Free rinsing to leave attractive, bright finish;
- Formulated with maximum concern for the environment, all surfactants, sequestrants and corrosion inhibitors, etc. are fully biodegradable and non-endocrine disrupting;
- Does not contain any cyanides;
- NOT suitable for use with aluminium, lead, tin or zinc alloy parts.

### Applications

Sodaclean is highly effective for the removal of soils and surface contaminants from ferrous and titanium metal surfaces.

It is suitable for use in:

Aerospace;  
Automotive;  
Precision engineering;  
Marine and General engineering.

### Compatibility

Sodaclean is compatible with ferrous and titanium metals and their alloys.



Certificate No. GB06/69741

Safer  
Solutions  
For Industry

## **Health and Safety**

Sodaclean is not flammable, is neither a known or suspected carcinogen and is formulated using environmentally acceptable detergents and surfactants. It does not contain any endocrine disrupting compounds that are damaging to watercourses or cyanides.

Sodaclean is classed as corrosive and contact with eyes and skin should be avoided. See Material Safety Data Sheet for details.

## **Typical Properties**

Appearance	Straw collared liquid
pH	14.0 units (Neat soln) 13.6 units (10% soln) 13.0 units (1% soln)
Density @ 20 °C	1.32
Solubility in water	Complete
Boiling Point, °C	100
Volatile Organic Compounds (VOC), g/L	Nil

Storage life in original, unopened containers, at between 0 °C and 35 °C (32° to 95 °F), is not less than 36 months.

### **Test Compliance:**

Meets the requirements of UK Defence Standard 03-2 method B1.

## **Process Control**

### **Plant / Equipment:**

Tanks/vats used to contain the cleaner should be manufactured from mild steel or corrosion resistant steel.

All pumps should be manufactured from mild steel.

Copper based alloys should be used with caution, some alloys are better than others and users should confirm suitability.

Heating coils should be made from suitable non-metallic materials, non-corrosion resistant steel, corrosion resistant steel or titanium alloys.

### **Solution Control:**

Process tanks should be analyzed periodically to determine the concentration of Sodaclean present and additions made to maintain the concentration within the recommended limits.

The test procedure to undertake this analysis is as follows:

Pipette a 10ml sample of the process solution into a conical flask.

Add 5 drops of bromophenol blue indicator sol'n (0.1%) and titrate against 0.1N

Hydrochloric Acid to a clear change of colour from blue to yellow.

Concentration of Sodaclean (g/L) = Titre x N x 15.63

Where N = exact normality of the hydrochloric acid.

Note: Where the result is required in oz/US gal multiply the g/L value by 0.1335

A special test kit is available to facilitate the analysis of the cleaner for users that have limited laboratory test facilities. Request information on this kit from your local Amity representative.

## **Processing Procedure**

The product should be operated at:

- A concentration of between 5 and 30 g/l (0.66 to 4.0 oz/US gal);
- A temperature between 40 °C and 80 °C (104 °F to 176 °F) is preferred.

Application is normally by dip. Allow sufficient contact time, normally 10 to 20 minutes dependant

upon the degree and nature of the contaminants, for the cleaner to penetrate, lift and adsorb any soils.

There is no problem with extended solution contact times up to 30 minutes, where particularly difficult soils are encountered. Removal of tenacious deposits can also be assisted by using a cloth, mop or stiff bristle brush.

Components should be rinsed thoroughly following processing prior to drying or proceeding to the next stage of a sequence of wet operations.

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## **CONTACT DETAILS:**

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For any further information, please contact your distributor or Amity.

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## **Packaging Details:**

Sodaclean is available in:

25 Litre Containers;  
210 Litre Drums