

Data Sheet



LAKELAND CS100-LF

INTRODUCTION

Lakeland CS100-LF is a phosphate ester blend specifically designed to perform in highly alkaline or acidic, low foam cleaning formulations.

SPECIFICATION

Appearance _(A10)	Clear viscous pale amber, to amber liquid
Acid Value (mg KOH.g ⁻¹)	320 - 360

() Denotes Lakeland Analysis Number

APPLICATIONS

Lakeland CS100-LF possesses exceptional stability and solubility in extremely high concentrations of alkali solutions. CS100-LF is also stable in acidic conditions and can offer enhanced performance in de-scaling formulations. This coupled with its excellent wetting and detergent properties as well as low foaming nature gives rise to a variety of applications:

- Metal Cleaning/Finishing
- Rinse Aids
- Bottle Washing
- Dairy Cleaning
- CIP Systems
- Floor Cleaning
- Hard Surface Cleaning

The low foaming properties of Lakeland CS100-LF are more noticeable at temperatures above 50°C.



PROPERTIES

S.G (20°C)	1.2
Viscosity (cPs/20°C)	1000

Solubility

The CS100-LF is completely soluble in a wide range of alkaline or builder solutions commonly encountered in cleaning situations eg. hydroxides, silicates, polyphosphates and organic sequestering agents. The following table illustrates the maximum concentration of various alkalis/builders with which 5% w/w CS100-LF remains soluble at 0 to 45 °C.

Alkali/Builder	Max Conc, % w/w
Potassium hydroxide	45
Sodium Hydroxide (32%)	30
Potassium Silicate	30
Tetrapotassium pyrophosphate	50
Ethylene diamine tetra acetic acid	40

CS100-LF is a 100% free acid and although it is not essential to neutralise the product prior to addition, it is advisable to do so in alkali and neutral formulations where free alkali is not available, to avoid a lowering of pH.

Complete neutralisation of CS100-LF is a pre requisite for clear stable formulations if silicate builders are to be used alone.

Base	g of base req'd to neutralise 100g CS100-LF
Potassium hydroxide	34.2
Sodium Hydroxide	24.5
Monoethanolamine	37.8
Triethanolamine	92.0

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HANDLING & STORAGE

Lakeland CS100-LF is irritant and as such should be handled wearing protective clothing, gloves, goggles and overalls. No problems should arise as long as good standards of housekeeping and safe working practice are maintained. The viscosity will be affected by storage at low temperatures.

For further health and safety details ask for safety data sheet.

This product will be stable for 12 months if stored in unopened sealed containers at temperatures between 0°C and 35°C. If these temperature limits are exceeded then physical changes may occur. Warming/cooling of the product to room temperature will facilitate reconstitution.

TRANSPORT

TARIFF HEADING: 2919.90.90

Non-hazardous

PACKAGING

1000 ltr IBC's

1000 kg nett

205 ltr plastic drums

200 kg nett

25 ltr plastic drums

25 kg nett

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