

## TECHNICAL DATA SHEET

### SC-1000 Aqueous Cleaner Concentrate

SafeCare SC-1000 is a new generation concentrated, aqueous, non-ionic, plant based surfactant system. It is non-toxic, biodegradable, and contains no terpenes, glycol ethers, petroleum distillates, caustic or acidic additives

SC-1000 is a release agent, which will effectively remove fats, oils, greases, proteins, sugars and general organic soils. SC-1000 provides effective cleaning on all substrates compatible with water. It reduces odours & bacterial growth by removing protein and sugar residues.

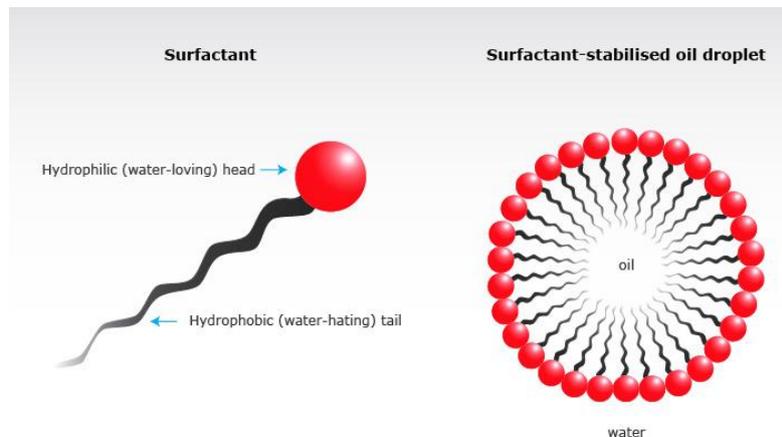
SC-1000 breaks up and solubilises greases, oils, fats and soils more effectively than conventional cleaners. SC-1000 is USDA Authorised for use in food processing areas, and complies with OSHA 29-CFR Ch. XVII 1910.1200 & 40-CFR Ch. 1 subparts C&D. It does not contain chemicals determined by USEPA or OSHA to be carcinogenic or suspected carcinogens.

#### The SafeCare Chemistry

SC-1000 is not a detergent, soap or petroleum based solvent. It is anti-oxidant by nature and will not harm any soiled substrates. SC-1000 will not react with other cleaning chemistries such as chlorine bleach to cause toxic off-gassing

SC-1000 is comprised of three plant-based surfactants that create a unique hydrocarbon release agent that can tolerate tremendous soil loads. It is so powerful that crude oil will be completely solubilized (surrounded) and held in suspension by only a small amount of SC-1000 without causing an emulsion or damage to the cleaning surface. Powerful micelle cleaning action causes long chain hydrocarbon soils to virtually repel from the cleaning surface so that soils can be rinsed away with water. Reba products are highly reusable, filterable and will not damage cleaning surfaces or react with other chemistries.

Surfactant colloids have minute particles called micelles. When combined with water, micelles break water's surface tension (the property that keeps water droplets round), resulting in "super wet" water. That same action allows the micelles to penetrate grease, oil and related soils and to hold them in liquid suspension. In effect, the micelles make the dirt and oils dissolve in water.



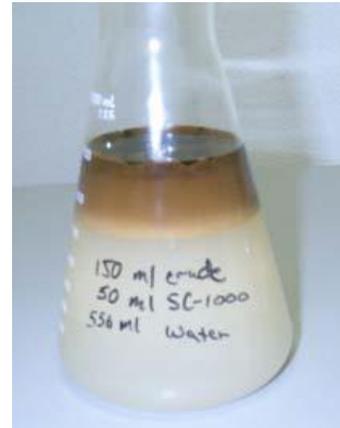
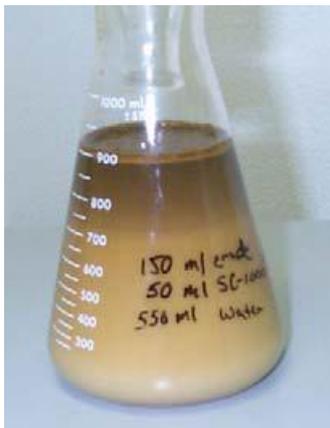
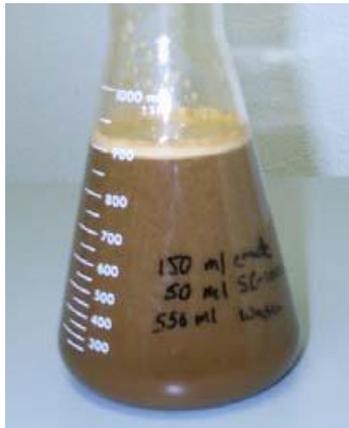
- SC-1000 is a powerful non-ionic surfactant. A surfactant (surface-active agents) is a compound that has two groups present in the molecule: One being hydrophilic in nature - water-liking
- One being hydrophobic in nature - water-hating or oil-liking.

When you have a surfactant with two groups present, you have a chemical compound that has surface-active properties or the ability to affect the interfacial relationship between two dissimilar substances such as oil and water.

SC-1000 is a unique hydrocarbon release agent, which is filterable, recyclable and can tolerate a tremendous soil load. It is so powerful that crude oil will be completely solubilized and held in suspension by only a small amount of SC-1000.

The basic SC-1000 formulation is a homogeneous blend of colloids, sequesterants and hyper-wetting agents that become "super-active" when processed together. The cleaning action is unique process where the random spinning interaction of the particles loosens the soil. While the cleaner will break up and lift away protein or fatty stains, it does not have the capacity to interact with the surface (substrate) it is cleaning; therefore, the product can not cause any harm to the surface.

SC-1000 is a hydrophilic and has a HLB of 13.85 favouring water phase attraction and therefore a very weak fatty phase interface. Non-ionic in nature, SC-1000 in water solution will auto disperse rapidly to displace petroleum hydrocarbons including contaminated solids, tank sludge, drilling muds, gases and solvent fractions and cause inert solids including tars, gravel and sands to stay at the bottom of the storage vessel while the hydrocarbon fractions rise to the top of the water column.



Illustrates the separation of crude oil and water using our plant-based, non-ionic surfactant system: SC-1000

## PHYSICAL & CHEMICAL PROPERTIES

<b>Form:</b>	Slightly viscous liquid
<b>Colour:</b>	Light amber
<b>Odour:</b>	Pleasant odour
<b>pH:</b>	10.2
<b>Boiling Point/Range:</b>	100°C
<b>Melting Point/Range:</b>	Not Applicable
<b>Freezing Point:</b>	30°F/-1°C
<b>Viscosity @ 25C:</b>	137 cps or 166.3 cs
<b>Dielectric Strength:</b>	1.5 KV
<b>Electric Conductivity:</b>	650 microohms/cm
<b>Decomposition Temperature:</b>	Higher than 348°C
<b>Flash Point:</b>	None (Penske Martin Closed Cup)
<b>Explosive Properties:</b>	None
<b>% Volatile by Volume:</b>	Nil
<b>Vapour Pressure:</b>	17.0 mm of Hg @ 20°C
<b>Vapour Density:</b>	0.623
<b>Relative Density:</b>	0.96 Kg/L
<b>Water Solubility:</b>	99.935%
<b>Surface Tension:</b>	29.5/cm @ 25°C
<b>Specific Gravity:</b>	1.017 @ 15°C
<b>Evaporation Rate:</b>	0.7
<b>Volatile Organic Compounds:</b>	None measurable

By U.S. EPA Methods 601, 602 and 608

## APPLICATION

- SC-1000 is a concentrated aqueous, all-purpose cleaner / degreaser for food , transport, hospitality, electronics, marine and manufacturing industries

**Heavy Cleaning Dilutions:** 1:1 up to 1:5

Diesel engines, auto parts, baked on oil or lube grease, water based paint, dried oil, thick food syrups, insect smears, dried animal or vegetable fats, dried food syrups, thick dust laden oily dirt, asphalt, and grass and plant stains

**Moderate Cleaning Dilutions:** 1:5 up to 1:20

Automotive work counters and tools, food & beverage processing equipment, oily or food laden floors, manufacturing work areas, vehicle maintenance, shipping containers, utility equipment, parts washers

**General Maintenance Dilutions:** 1:20 to 1:100

Vehicle washing, general janitorial for office, schools, hospitals, recreation etc, pressure sprayers, food preparation and storage, painted/plastic laminated surfaces, sports equipment, general cleaning, immersion tanks, ultrasonics

**Window and Glass Cleaning:** 1:300 to 1:350

## TOXICOLOGY

**Acute Toxicity:** Non-toxic.

**Local Effects:** None.

**Specific Effects:** None.

## ENVIRONMENTAL INFORMATION

Non-toxic, non-hazardous, non-flammable, and safe for the environment. This product is readily biodegradable according to OECD Method, Modified Sturm Test.

## DISPOSAL CONSIDERATIONS

**Waste from Residues/Unused Products:** Concentrate can be used after filtering. Product is recyclable.

**Contaminated Packaging:** If recycling is not practicable, dispose of in compliance with the Environmental Protection (Duty of Care) Regulations 1991 if contaminated with hazardous materials. May be disposed of in neat form.

## REGULATORY INFORMATION

Product complies with all known regulatory considerations and is unregulated and not listed as a Hazmat by any agency.

## PACKAGING

SC-1000 Concentrate is available in 5L, 20L and 200L drums. Optional packaging includes 275Gal IBC (1,040L).

