

# **SAFE CARE**<sup>®</sup>

*Cleaners, Solvents & Specialty Products*



**GEMTEK**<sup>®</sup>  
P r o d u c t s



# SAFE CARE®

Cleaners, Solvents and Specialty Products

Powerful plant-based industrial cleaners, solvents and specialty products that provide extraordinary cleaning results while protecting you and the environment.



Members of the Biobased Manufacturers Association

SAFE CARE® products provide an alternative for environmentally responsible companies who appreciate and understand the need to use non-toxic industrial chemical products. Using cutting-edge technology, SAFE CARE® products offer the industrial user powerful and effective cleaners, degreasers, solvents and specialty products without the

environmental or personal hazards associated with traditional, toxic chemistries. SAFE CARE® products rely on renewable plant-based chemistries that are safe to use, store and dispose of and comply with all applicable OSHA, SARA, SNAP, USEPA and USDA regulations for safety. SAFE CARE® products are highly filterable and reusable and will not damage the cleaning surface or react with other chemistries.

SAFE CARE® products carry USDA NSF registration for several food processing applications.



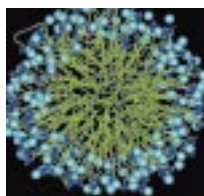
SC-1000™ is on the USEPA National Oil & Hazardous Substances Pollution Contingency Plan (NCP) Product Schedule

Comprised solely of plant-based materials, SAFE CARE® products contain alcohols, fatty acids, esters, waxes, saponifiers, chelators, enzymes and other fractions from soy, corn, palm kernel, peanut, walnut, safflower, sunflower, Canola, and cotton seed. The surfactants created by GEMTEK® consist of long-chain molecules; one end likes water, and is called

hydrophilic, the other end likes oil and dislikes water, and is called hydrophobic. When these surfactants are placed in water, the hydrophobic ends attract each other, and repel water, and arrange themselves into a spherical structure with the hydrophobic ends inside the sphere at its nucleus, and the hydrophilic ends on the outer surface of the sphere. This sphere is called a micelle.

The hydrophobic ends begin to orient themselves on the surface of the soil lifting it from the cleaning surface to become part of a micelle, thus cleaning the surface. When combined with water, micelles break water's surface tension resulting in "super wet" water. That same action allows the micelles to penetrate organic soils and to hold them in liquid suspension. In effect, the micelle cleaning action is

unique and can only be related to the effect of an atomic explosion where random interaction of the particles loosens the soil.



*Micelle: The hydrophilic ends (heads) of the surfactant molecules are depicted as balls, and the hydrophobic ends (tails) are lines.*

Figure A

Micelles enable us to clean soils without damaging the cleaning surface. Figure "A" is a highly schematic illustration of the manner in which the colloid particles called micelles perform in reducing surface tension of water in a very dilute solution.

Our leading formulation, *SC-1000™ Aqueous Cleaner*, is the most versatile and powerful surfactant systems in the industry today.

*SC-1000™ Aqueous Cleaner*, the core ingredient in many **SAFE CARE®** products, is so powerful that crude oil will be completely surrounded and lifted from the cleaning surface without causing an emulsion or damage to the cleaning surface.

The technology used for cleaning chemistries derived from *SC-1000™* are colloidal solutions comprised of plant-based non-ionic surfactants that create unique hydrocarbon release agents that can tolerate tremendous soil loads. Powerful micelle cleaning action causes long chain hydrocarbon soils



**SAFE CARE®** cleaners and solvents may be used throughout manufacturing facilities.

such as fats, greases, oils, lipids, proteins and sugars to virtually repel from the cleaning surface so that soils can be rinsed away with water.



*SC-1000™ Aqueous Cleaner* was one of the first products certified under the Clean Air Solvents program by the California South Coast Air Quality Management District; *SC-Aircraft & Metal Cleaner™* and *SC-Solv-Ex Safety Solvent* later became part of that list of Clean Air Solvents.

The **SAFE CARE®** Safety Solvents include product formulations that are evaporative and non-evaporative with KB values ranging from 150 to over 1000. *SC-Supersolve™* and *SC-Solv-Ex Safety Solvent™* is water-miscible and is ideal for use with the **SAFE CARE®** aqueous cleaners, while

other solvents such as *SC-EZ-Solv™* are non-water miscible.

*SC-1000™* is safe to use in post-harvest wash applications.



**SAFE CARE® PRODUCTS ARE:**

- Non-toxic
- Non-reactive
- Non-carcinogenic
- Readily biodegradable
- Derived from renewable resources
- Safe to use, store and dispose of

**SAFE CARE® PRODUCTS DO NOT CONTAIN:**

- Petroleum distillates
- Glycol ethers
- Terpenes
- Synthetics
- Builders & reagents
- Caustics
- Volatile organic compounds (VOCs)



**GEMTEK®** is pleased to have nine of its **SAFE CARE®** products pass the stringent requirements of the USEPA Design for the Environment Program, including:

- SC-1000™ Aqueous Cleaner Concentrate
- SC-Premium Laundry Detergent
- SC-Magic Pan™ Hand Dishwashing Liquid
- SC-More Than Glass™ Cleaner
- SC-EZ-Solv™ Safety Solvent
- SC-Odor-Ex Odor Neutralizer
- SC-Odor-Ex Cleaning Deodorizer
- SC-OmniBrite Acid Cleaner
- SC-OmniBrite Alkaline Cleaner

## CLEANERS:

SC-1000™ Aqueous Cleaner Concentrate

SC-2000™ All Purpose Cleaner

SC-Multi-Surface Cleaner

SC-Aircraft and Metal Cleaner™

SC-More Than Glass™ Cleaner

SC-Heavy Duty Hand Cleaner

SC-Grease Trap and Drain Cleaner

SC-Fruit & Vegetable Wash

SC-Stainless Steel Cleaner

SC-Magic Pan™ Hand Dishwashing Liquid

SC-Kitchen Exhaust Hood & Filter Cleaner

SC-Floor & Tile Cleaner

SC-Bathroom Cleaner

SC-Premium Laundry Detergent

SC-Laundry Stain Remover & Pre-soak

SC-Carpet and Upholstery Spotter & Shampoo

SC-Safe-T-Solve Concrete Cleaner

SC-Mold & Mildew Cleaner

SC-Oven & Grill Cleaner

## SAFETY SOLVENTS:

SC-Supersolve™

SC-MaxiSolv™

SC-EZ-Solv™

SC-Actisolv™

SC-Graffiti, Tar & Gum Remover

SC-Solv-Ex

SC-SoyEster™

## SPECIALTY PRODUCTS:

SC-Odor-Ex Odor Neutralizer

SC-Odor-Ex Cleaning Deodorizer

SC-OmniBrite Acid Cleaner

SC-OmniBrite Alkaline Cleaner

SC-Steel Bright Polish



## INDUSTRY APPLICATIONS

### INDUSTRIAL

Metalworking  
Manufacturing  
Process Cleaning  
Facilities Maintenance

### TRANSPORTATION

Aviation  
Marine  
Rail/Bus  
Trucking  
Automotive

### FOOD PROCESS

Food Process Cleaning  
Meat, Poultry, and Fish Processing  
Egg Processing  
Dairy Product Processing  
Beverage Production

### AGRICULTURAL

Irrigation Cleaner  
Root Stimulator  
Soil Remediation  
Equipment Cleaning

### PETROLEUM

Oil Spill Recovery  
Soil Remediation  
Equipment and Rig Maintenance  
Cooling Pond Clarification  
Terminal and Production Facility  
Maintenance

### GOVERNMENT

Military  
Department of the Interior  
Department of Energy  
National Parks & Recreation

**GEMTEK**  
P r o d u c t s

*Safely Cleaning Planet Earth®*

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