



Cola[®] Det 190-NPF

DESCRIPTION

Cola[®] Det 190-NPF is a highly concentrated, proprietary blend of anionic and nonionic surfactants that can be used as a base for a wide range of dishwash, laundry and other household cleaning products, covering the range from economy to premium formulations. **Cola[®] Det 190-NPF** has been recently reformulated for use in Europe. The new **Cola[®] Det 190-NPF** is nonyl phenol free and its components are all approved for use in Europe.

Cola[®] Det 190-NPF can be used in varying amounts to meet the performance and appearance requirements of a wide range of dishwash and laundry products. Formulations based on **Cola[®] Det 190-NPF** are mild to the hands, give long-lasting flash foam and have excellent cleaning power. **Cola[®] Det 190-NPF** is useful in making high solids products because of its superior solubility and tolerance to electrolytes and builders.

Cola[®] Det 190-NPF is biodegradable. Detailed biodegradability information is available upon request from each of the components in the blend.

TYPICAL PROPERTIES

Appearance	Clear yellow liquid
pH, 10%	8.0
Solids, % by Wt.	91.1
Pour Point, °C (°F)	-15 (5)
Cloud Point, °C (°F)	52 (126)
Color, Gardner	1.8
Flash Point, SETA, °C(°F)	54 (129)
Density, g/ml (lbs./US gal)	1.053 (8.77)
Viscosity, cps @ 25°C	306
RVOC, U.S. EPA, % (Ethanol)	5

CLEARANCES

The components in **Cola[®] Det 190-NPF** are listed in Europe (EINECS), Canada (DSL), Australia (AICS), and Japan (ENCS).

FORMULATING

Some light duty detergent base formulations are listed in Table 1. To make these blends **Cola®Det 190-NPF** is added to the water and **Cola®Trobe INC**; mix slowly to avoid forming a vortex which would create foam; the pH is adjusted by adding an acid. It is not necessary to neutralize the alkalinity of **Cola®Det 190-NPF** when making laundry products. Then salt and urea are added and dissolved. When the desired viscosity is obtained, dye or fragrances can then be added.

Cola®Det 190-NPF and **Cola®Trobe INC** are registered trademarks of Colonial Chemical, Inc.

TABLE 1
BASE FORMULATIONS AND THEIR PHYSICAL PROPERTIES

INGREDIENTS, % WT.	Economy Dishwash	Intermediate Dishwash	Economy Laundry	Spray & Wipe
Cola®Det 190	10.9	21.9	9.6	1.5
Sodium Chloride	2.0	-	1.9	-
Cola®Trobe INC	-	1.5	0.9	2.0
Water	79.6	76.6	78.3	90.5
Urea	8.0		9.3	-
Butyl cellosolve				3.0
Na ₄ ,EDTA				2.0
Sodium metasilicate, anhydr				1.0
PROPERTIES				
Solids, %	20.0	20.6	20.3	5.2
Viscosity, cps	165	185	130	4
pH, as is	7.2	7.3	8.4	12.9

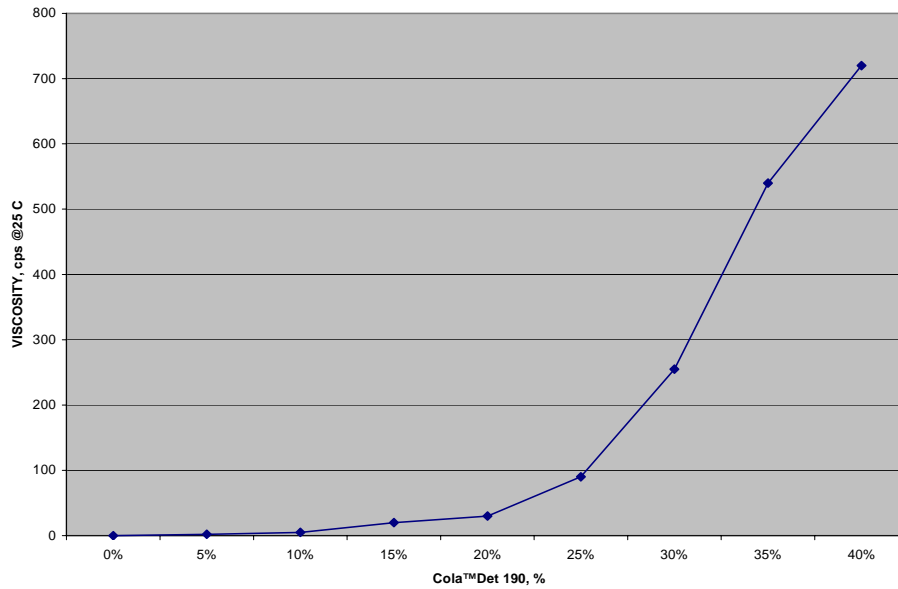
Any of the above formulations are clear and remain so at temperatures as low as 5°C (41°F), if frozen they return to clear, homogeneous liquids after thawing.

OPACIFIERS

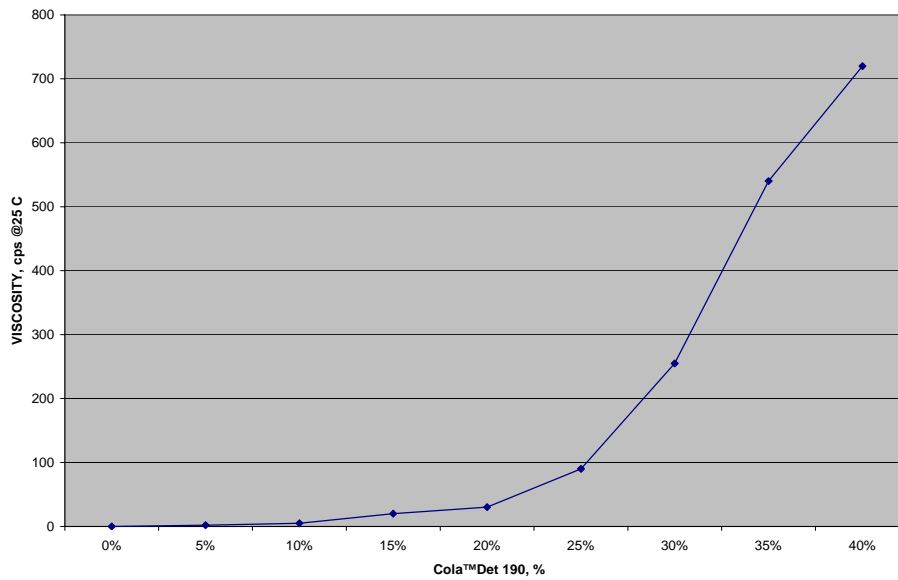
Typical dishwash and laundry liquids have viscosities in the range of 50 to 300 cps. Figure 1 shows the viscosity of **Cola®Det 190-NPF** at various dilutions.

When using more than 20% **Cola®Det 190-NPF**, a viscosity reducer, such as **Cola®Trobe INC**, or ethanol, may be needed. Blends containing less than 10% **Cola®Det 190-NPF** may require salt to increase the viscosity. The amount of sodium chloride needed to adjust the viscosity of **Cola®Det 190-NPF** at various concentrations is shown in Figure 2.

Viscosity of Cola™Det 190 In Water



Viscosity of COLADET 190-NPF In Water



LAST UPDATED 07/13/2006

WARRANTY

Colonial Chemical guarantees that its products meet published specifications. No other warranties or guarantees are expressed or implied because the use of this material is beyond the control of Colonial Chemical.

Colonial Chemical, Inc.

www.colonialchem.com

225 Colonial Drive
South Pittsburg, TN 37380

Ph: 423-837-8800
Fax: 423-837-3888

