



CSF is an advanced cationic surfactant system finding application in most all Industrial, Commercial an H.I.& I. applications. CSF offers superior detergency in both low and high pH formulation environments.

CSF has excellent foaming properties, hard surface lubricity and superior rinsing properties.

- FEATURES AND BENEFITS:**
- Cleaner and degreaser formulations
 - 100% biodegradable in less than 9 days
 - Creates the lowest environmental impact surfactant system for the hard surface product formulating industry.
 - CSF qualifies for the widest regulatory clearance including EINECS (Europe); TSCA (USA); CEPA; DSL (Canada); MITI (Japan); AICS (Australia); and PICCS (Philippines).
 - OECD 301B—modified
 - No bioaccumulation
 - Log Pow 1.8(OECD 117)
 - Test show CSF is non-fish-tainting

TYPICAL PHYSICAL PROPERTIES:	
% Active:	38
Cloud Point, °C:	-7
Specific Gravity	1.00
Draves Wetting, sec @ 25°C:	3.0
Flash Point, PMCC, °C:	N/D
Form @ 25°C:	Liquid
Freeze Point, °C:	0
Interfacial Tension:	N/D
Surface Tension, mN/m:	41
Viscosity, cps @ 25°C:	81
RVOC, U.S. EPA %:	0

DIRECTIONS FOR USE:

Use per your own formulary data and requirements. Blending ratios may vary based on the specific application. Consult a Heartland Energy Group, Ltd. Representative for formulary recommendations.

It is always recommended to performance test the compatibility of all fluid systems prior to use. Jar testing is always recommended.

STORAGE AND HANDLING:

Rinse empty container with water and discard as per federal, state and local guidelines.

PACKAGING:

CSF is packaged in 5 gallon to 275 gallon containers. Bulk quantities are available upon request.

Recommendations given in this data sheet are based on tests believed to be reliable. However, the use of the information is beyond the control of Heartland Energy Group, Ltd. and no guarantee, expressed or implied is made to the results obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage from the misuse of the product as such, or in combination with other materials. This bulletin is not to be taken as a license to operate under or recommendation to infringe any patent.