

# SURFOM® SC 8895 DISPERSANT PACKAGE









SUSPENSION CONCETRATE

In agricultural applications

Suspension Concentrates accounts for 27% of all Crop Protection Market value and 15% of the volume applied, which illustrates a high relative price of this products compared to other formulations types. In the past 10y, the value has increase more than 10% in terms of value.

It's common to have high loads of Active Ingredient in this kind of formulation, which is not soluble in water. The right package of Dispersant and Wetting Agent play an important role to estabilize the formulation

Oxiteno has a broad portfolio of surfactants for liquid formulations. SURFOM SC 8895 is a good Dispersant Package suitable for high load formulations, that supports our customers to explore the full potential of SC formulations in agrochemical applications.







DISPERSANT PACKAGE FOR SC FORMULATIONS

**Convenience –** Package of Dispersant with Good Handling and Low Viscosity

**Efficiency –** Usage in lower dosages (2 to 3 times) when compared to other packages for SCs with good stability results









**APPLICATIONS** 

### DISPERSANT PACKAGE FOR SUSPENSION CONCENTRATE

 SC formulations usually have higher loads of Als, which difficults the formulation estability. The selection of the right package of Dispersant for the formulations enables good stability and performance with lower dosages of surfactant. SURFOM SC 8895 is the right blend with good Dispersive properties within lower dosages when compared to other combination of surfactants. It has presented good results of stability for herbicides and fungicides

37.28



ATRAZINE 500 SC #1 SUGGESTIVE FORMULATION	Concentration % w/w
Active ingredient (Herbicide)	47.32
Ethylene Glycol (Antifreeze)	2.5
SURFOM® SC 8895 (Dispersant Package)	2.5
Antifoam	0.2
Xanthan Gum Slt. 2% (Rheological Modifier)	8.5

Water

#### **Initial Condition**

**Stability Test 14d** 

<b>Appearance</b>	Viscous White Liquid	Milky White
рН	6.65	6.37
pH 1% in water	6.25	6.46
Wet Sieve 200mesh (%)	99.99	100.11
Suspensibility	100.0	97.69
Viscosity at 25°C (cP) and 80 RPM	385.03	345.3
Density at 20°C (g/cm³)	1.0359	1.0964
Solid Content (%)	51.46	53.655
Particle Size Distribution D50 / D90	2.47 / 6.9	2.32 / 6.42 OXITENO



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Water	37.28



Good stability after 14 days with no significant increase in particle size

No phase separation nor Settling in 0°C, 25°C and 54°C



Lower dosage when compared to benchmarks (2 to 3 times lower)



**Easy to Handle Dispersant Package** 





### SURFOM SC 8895

#### **BENCHMARK**

AZOXYSTROBIN 200 + CYPROCONAZOLE 80 SC #2 SUGGESTIVE FORMULATION	Concentration % w/w
Azoxystrobin (Fungicide)	18.70
Cyproconazole (Fungicide)	7.50
Ethylene Glycol (Antifreeze)	5.0
SURFOM® SC 8895 (Dispersant Package)	5.0
Antifoam	0.20
Preservative	0.20
Xanthan Gum Slt. 2% (Rheological Modifier)	8.50
Water	37.28

<b>Appearance</b>	Viscous White Liquid	Viscous Brown Liquid
рН	7.41	4.63
pH 1% in water	7.884	4.65
Wet Sieve 200mesh (%)	100	99.83
Suspensibility	100	100
Viscosity at 20°C (cP)	292	258
Density at 20°C (g/cm³)	1.0235	1.100
Solid Content (%)	46.89	47.12
Particle Size Distribution D50 / D90	1.48 / 3.8	1.83 / 25.1 OXITENO



**SURFOM SC 8895** 

**BENCHMARK** 

## AZOXYSTROBIN 200 + CYPROCONAZOLE 80 SC Concentration #2 SUGGESTIVE % w/w FORMULATION

FURIVIULATION	
Azoxystrobin (Fungicide)	18.70
Cyproconazole (Fungicide)	7.50
Ethylene Glycol (Antifreeze)	5.0
SURFOM® SC 8895 (Dispersant Package)	5.0
Antifoam	0.20
Preservative	0.20
Xanthan Gum Slt. 2% (Rheological Modifier)	8.50
Water	37 28

<b>Stability Test</b>
$14d - 0^{\circ}c$

Stabili	ty Test
14d -	- 25°c

<b>Stability Test</b>	
14d – 54°c	

#### Particle Size Distribution D50 / D90

1.91 / 4.31	1.30 / 3.29
1.3 / 2.59	1.34 / 3.71
1.37 / 3.33	3.78 / 108



#### DISPERSANT PACKAGE CROP SOLUTIONS

### DISPERSANT PACKAGE FOR SC FORMULATIONS

0.20

8.50

37.28

**SURFOM SC 8895** 

**BENCHMARK** 

AZOXYSTROBIN 200 +	
<b>CYPROCONAZOLE 80 SC</b>	
#2 SUGGESTIVE	% w/w
FORMULATION	

Azoxystrobin (Fungicide)	18.70
Cyproconazole (Fungicide)	7.50
Ethylene Glycol (Antifreeze)	5.0
SURFOM® SC 8895 (Dispersant Package)	5.0
Antifoam	0.20

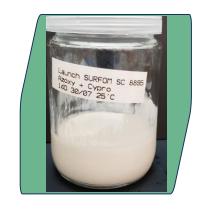
Preservative

Water

Xanthan Gum Slt. 2%

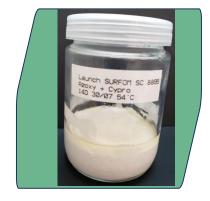
(Rheological Modifier)

**Stability Test**  $14d - 25^{\circ}c$ 





**Stability Test**  $14d - 25^{\circ}c$ 









AZOXYSTROBIN 200 + CYPROCONAZOLE 80 SC #2 SUGGESTIVE FORMULATION	Concentration % w/w
Azoxystrobin (Fungicide)	18.70
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25°C and 54°C



Lower dosage of surfactant when compared to benchmarks (2 to 3 times lower)



**Easy to Handle Dispersant Package** 





#### DISPERSANT PACKAGE FOR SC FORMULATIONS



When developing Suspension Concentrate formulations it's important to choose the right package of surfactants to compatibilize with the high load of AI, in order to mantain the stability, rheology modifiers plays an important role in this formulation. **SURFOM® SC 8895** is a complete package of surfactant with good dispersant properties, delivering good stability / performance for different suggestive formulations within low dosages and good handling.



### **TECHNICAL PROPERTIES**

- Appearance (25°C): Ambar clear liquid
- Solubility in water (10%) soluble
- Density (25°C) : 1.074 g/cm3
- Viscosity (25°C): approx. 300 cP
- Flash Point > 100 °C
- Pour Point: < 20°C</p>









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### **TECHNICAL PROPERTIES**

#### **Quality Requirement**

pH, 5wt% aqueous solution, 25°C Appearance, 25°C Dry Matter (105 +/- 5°C 1h) %

### Commercial Specification Min Max

3.5 5.5viscous liquid70 80



