



TENSIOFIX

**EW
FORMULATION**

TYPICAL FORMULA

Active ingredient(s)	100,00 g/l	to	600,00 g/l
Surfactant(s)*	40,00 g/l	to	150,00 g/l
Glycol	50,00 g/l	to	100,00 g/l
Antifoam agent	1,00 g/l	to	5,00 g/l
Water	Quantity adjusted to 1 l		

* Emulsifier(s).

DEVELOPMENT STEPS

1 Check the active ingredient (a.i.) properties.

- Liquid (solid pesticides are made soluble in a minimum quantity of solvent)
- Low solubility of the a.i. in water
- A.i. non sensitive to hydrolysis.

2 Identify the right emulsifiers.

Range of Tensiofix® emulsifiers

Our alkylphenol free range of emulsifiers for EW consists in 5 main products:

- Tensiofix® 96 DB 08
- Tensiofix® 96 DB 10
- Tensiofix® DP 400
- Tensiofix® EW 70
- Tensiofix® XA 265

User guidelines

For each formula there is an optimum phase ratio; usually, the best ratio Oil phase/Water phase is 60/40 but this optimum will vary with the nature of the oil phase.

- Oil phase: a.i. + (solvent if required) + surfactants
- Water phase: water + antifoam + glycol.

As first trial, we recommend testing Tensiofix® EW70 at 6% w/w.

In case of droplet size or viscosity increase, the combination of Tensiofix® EW70 with another emulsifier is recommended.

Tensiofix® EW 70

+

Tensiofix® 96 DB 10
Tensiofix® 96 DB 08
Tensiofix® XA 265

4 - 6% w/w

0,2% - 1% - 2% w/w

Another typical emulsifier combination is as follows:

Tensiofix® 96 DB 10

+

Tensiofix® XA 265

4 - 6% w/w

0,2% - 1% - 2% w/w

3 Identify the other components:

Anti-freeze agent (+ co-surfactant effect)

Dipropylene glycol, propylene glycol, hexylene glycol...

Antifoam

Typical silicone emulsion.

MATERIAL REQUIRED

- High shear homogenizer.



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