TYPICAL FORMULA

| Active ingredient | 40,00 g/l | to | 300,00 g/l |
|-------------------|--------------------------|----|------------|
| Surfactant(s)* | 80,00 g/l | to | 150,00 g/l |
| Structuring agent | 10,00 g/l | to | 40,00 g/l |
| Oil | Quantity adjusted to 1 l | | |

^{*} Emulsifying-Dispersing agent(s).

DEVELOPMENT STEPS

- 1 Check the active ingredient (a.i.) properties.
 - · Solid powder
 - Insolubility of the a.i. in oil
 - High melting point of the a.i. (ideally > 80°C).
- 2 Identify the right emulsifying-dispersing agent(s).

Range of Tensiofix® emulsifying-dispersing agents

Our alkylphenol free range of emulsifying-dispersing agents consists in 4 main products:

- Tensiofix® 96 DB 08
- Tensiofix® 96 DB 10

- Tensiofix® IW 60
- Tensiofix® NTM

User guidelines

The oil as well as the active ingredient will dictate the surfactants to use.

If the selected oil requires more hydrophobic surfactants (e.g. Soya oil, Rapeseed oil), we recommend the use of Tensiofix® 96 DB 10 or Tensiofix® NTM alone.

If the selected oil requires more hydrophilic surfactants (e.g. Methylated seed oil), we recommend the use of Tensiofix® 96 DB 08/Tensiofix® IW 60. Note that Tensiofix® 96 DB 08 is usually combined with Tensiofix® IW 60.

3

Identify the other components:

Structuring agent

As structuring agent, we recommend the use of 1,5% - 3% w/w of Tensiofix® 869; the use of some water (between 10 g/l and 100 g/l) enables to accelerate the activation of the Tensiofix® 869. The a.i. must be non-sensitive to hydrolysis.

The use (1% - 4% w/w) of some silica may also help to confer a structure to the formula.

The oil can be mineral or vegetable (crude or esterified oil).

The esterified oils are more & more attractive because less viscous.

MATERIAL REQUIRED

- · Premix preparation: high shear homogeniser
- Wet grinding: glass beads grinder.







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