

BIOCHEM show case

New surfactants with a lower environmental impact without loss of performance

Problem

Speciality surfactants are used in coatings formulations to impart colour and stability. Existing surfactants are made from non-renewable sources and are not biodegradable.

Technical solution

Dow developed the Ecosurf line of surfactants, which is based on natural alcohols, mostly from palm kernel oil, that have been chemically modified. The range also includes a new chelating agent, hydroxyethyliminodiacetic acid that, unlike competing chelants such as organophosphonates, is biodegradable.

Benefits

- **Meet most environmental and handling safety standards world-wide**
- **No VOC emissions**
- **Biodegradable**

Improved performance attributes important to coatings applications:

- **No aqueous gelling**
- **Rapid dissolution (even in cold water)**
- **Fast foam collapse and favourable formulating and handling properties**
- **Excellent wetting properties, with low equilibrium surface tension**

- **Rapid dynamic surface tension reduction**
- **Suited to pigment wetting and stabilization**
- **Low odour**

Additional information

Dow coating

Website

<http://www.dow.com/coating/>

Dow surfactants

Website

<http://www.dow.com/surfactants/products/seedoil.htm>