

# Important information

## for rotogravure and flexographic printing companies

### Nitrocellulose and distillation

In the past we realized that some companies install simple and unsafe distillation units to high-tech printing machines or applications with Nitrocellulose. This is in fact very dangerous and a great risk for those companies who like to safe money with their wrong investment. Due to this reason, we must expressly warn and disabuse.

EuPIA, European Printing Ink Association ([www.eupia.org](http://www.eupia.org)) has published an important document for the “**safe use of Cellulose Nitrate Printing Inks and Related Products**” in Distillation units. EuPIA is a group inside CEPE . CEPE is the European Council of producers and importers of paints, printing inks and artists’ colours. CEPE represents the interest of approximately 1000 members in the European Union, Norway and Switzerland.

### The potential risk with handling NC are

- Exothermic reaction (generating heat and fumes)
  - Flammability or self-ignition if concentrated and dry
  - Self-ignition Temperature >100 °C
  - Overheating (on heating surface) and incrustation (on heating surface)
  - Exothermic reaction (generating heat and fumes)
  - Flammability or self-ignition if concentrated and dry
- In Section 3.3. the document says

### Solvent vapour explosion may occur with following condition:

1. Evaporation of distillation residues due dryness (typical batch distillation), e.g. absence of monitoring or switch-off is effected by pre-set time only.
2. Product temperatures higher than 100 °C
3. Locally overheated zones when vessel content remains unmixed
4. Decomposition
5. Overheating in incrustations

• **“in any case, printers should carefully consider the recommendations made by the distillation equipment manufacturer”**

- Product temperature must be kept below 100 °C
- Only vacuum distillation units are recommended
- Reliable scrape off the incrustation is recommended