



Natürlich aus Pflanzen

LIVOS · Auengrund 10 · D-29568 Wieren

**Forschungs- und Entwicklungs-  
gesellschaft mbH & Co KG**

**Auengrund 10  
D-29568 Wieren**

**Tel. 0 58 25/88-0 Fax 88 60**

**Internet: [www.livos.de](http://www.livos.de)**

**email: [info@livos.de](mailto:info@livos.de)**

## LIVOS and VOC`s

Paints and Varnishes are one of the most important sources for VOC emissions. VOC`s are not only causing problems for the atmosphere, but are also a health risk for the painter and the people who live in the painted houses. Often the concentrations of emitted VOC`s are rather high and can lead to chronicle diseases and allergies. On most tins there are no declarations regarding the used ingredients and solvents.

Already since 1984 LIVOS declares all it`s used ingredients openly on labels, Technical Data Sheets and corresponding MSDS. There are many solvent-free or High-Solid LIVOS products, but also the solvent-containing LIVOS products are not harmful for the human beings. In contrast to "white spirit, esters, ketones or NMP", solvents other paint companies are using, LIVOS accepts only:

- water
- orange oil ( only in food grade quality )
- bioethanol ( denatured with the natural resin shellac )
- isoaliphates ( free of aromatic hydrocarbons, used in food industry, cosmetics, pharmaceuticals and in hospitals)

Since even natural solvents, like turpentine oil or other terpene can cause allergies, LIVOS has decided to use mainly the less harmful solvent isoaliphates. It is manufactured from crude oil and highly purified with a neutral smell, so that it is suitable for most of the allergy-prone people.

LIVOS oils for the treatment of wooden floors and furniture are unique coatings. Synthetic resins and polymers usually form a layer on top of the wood. LIVOS products are composed of natural vegetable oils and tree resins, which can penetrate into the pores of the wood, protecting it against water, stains and dirt like it is being done in nature. Wood coated with LIVOS products is highly breathable and is maintaining its natural character.

Since this is a valuable product using mainly natural resources, it could be of public interest to make those products more well-known. For some LIVOS products VOC`s still have to be used. We think it is therefore necessary to distinguish between the harmful, often unknown factor, and the natural and fully declared VOC`s. An exemption by the EPD regarding VOC regulation could be helpful in spreading those products among the public.

LIVOS-Pflanzenchemie Forschungs- und  
Entwicklungsgesellschaft mbH & Co.KG

Dr. R.Filbrich  
Dipl.-Chem.