



LIVOS

Solvents

**Solvents** bring highly viscous binding agents into a liquid, brushable form, they are also named as thinners.

**LIVOS-solvents** are besides water and alcohol, orange oil in food-grade quality and Isoaliphate.

Solvents are differently evaluated since 1995 in the European Union:

Germany: With MAK (maximum allowable concentration),  
WGK (water hazard class) and danger symbols.

Scandinavia: After aspects according to occupational medicine.

EU-wide: Restrictions by Decopaint directive (2004/42).

The federation of the occupation and work physicians informed already 1987:  
"Allergies like e.g. dermatosis, have become to the occupational illness No. 1  
in the BRD (Federal Republic of Germany) by contact with oils and solvents."

**LIVOS**-solvents are selected and evaluated by human and environmental compatibility.

Since also natural solvents can be health precarious in high concentrations,  
LIVOS itself has already 1986 decided for a new concept and used Isoaliphate  
preferentially, if solvents are necessary. There are many solvent-free products.

Select your alternative,  
health goes before naturalness.

<b>Solvents</b>	<b>Use</b>	<b>Health risks</b>	<b>TRGS</b>	<b>MAK*</b>	<b>Warning Symbol</b>	<b>WGK**</b>
Natural Balsam Turpentine	Natural laquers, Thinner	Irritation of mucous membranes, skin eczemas ("painter scabies")	900	100 ppm	Xn > 25%	2
Natural Citrus peel oil	Natural laquers, -oils, Thinner	Irritation of mucous membranes, Allergic reactions	900	100 ppm	Xi > 1%	2
Isoaliphate	Cosmetics, pharmaceuticals, food cleaning, Solvents for paints and lacquers	Irritations at higher air concentrations	900/901	1000 mg/m <sup>3</sup>	Xn > 10%	1
Xylene	Nitro - and synthetic resin lacquers	Disorders of the central nervous system, narcotic effects	900	100 ppm	Xn > 12,5%	2
Toluene	Nitro - and synthetic resin lacquers	Disorders of the central nervous system, narcotic effects	900	50 ppm	Xn > 12,5%	2
n-butyl glycol	Water-based varnish (acrylic paint)	Irritation of mucous membranes, skin resorption	900	100 mg/m <sup>3</sup>	Xn > 12,5%	1
1,1,2-trichloroethylene	Stripping agent	Narcotic effects, carcinogenic, mutagenic	900	3,6 ppm	T	3

Explanations of the abbreviations: \* MAK = maximum allowable concentration (The lower the value, the more dangerous is the substance)

\*\* WGK = water hazard class

Xn = Harmful T = Toxic

TRGS = Technical Rules on Hazardous Substances

Xi = Irritant