

GEV



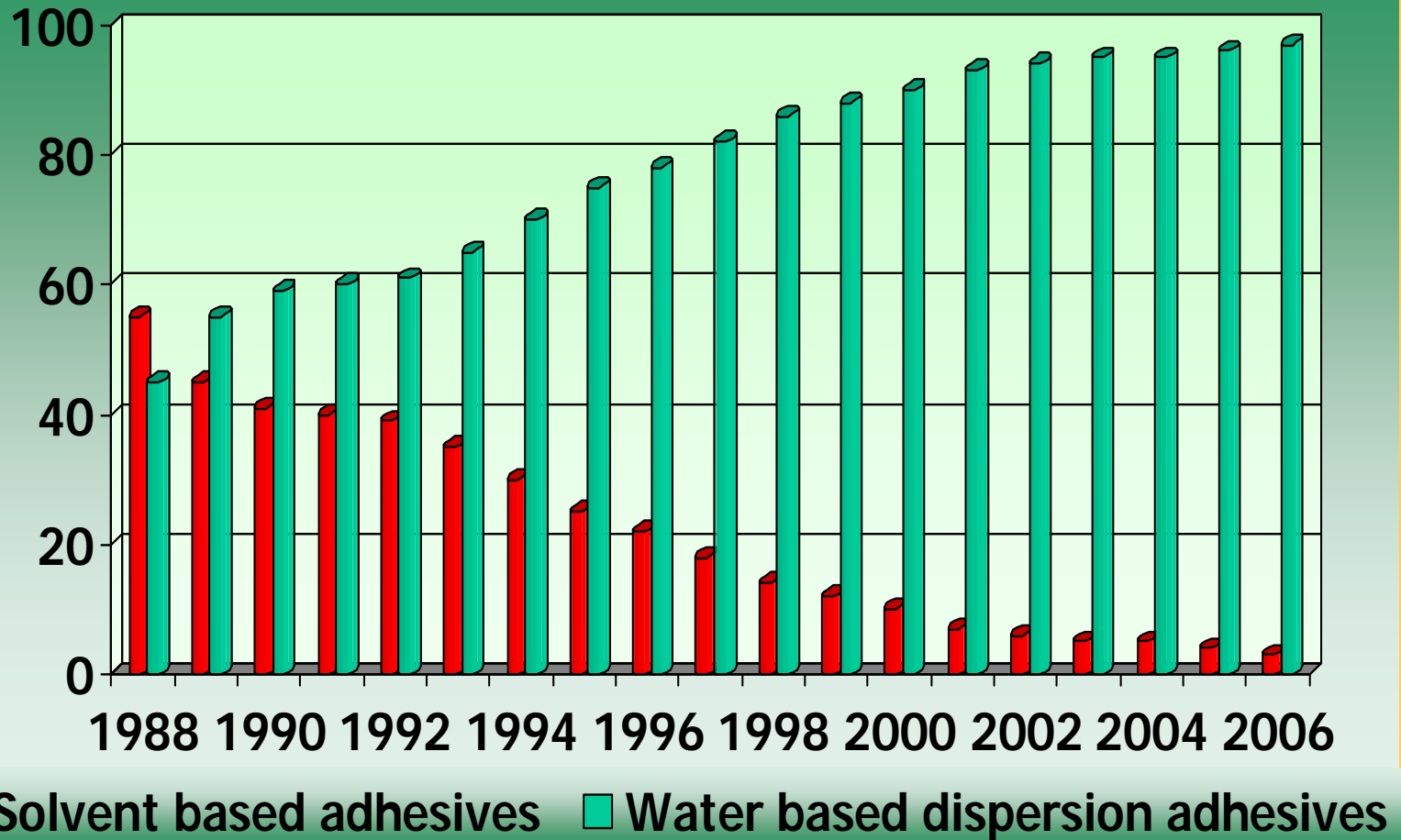
- Association for the Control of Emissions in Products for Flooring Installation, Adhesives and Building Materials

EMICODE Labeling System – Basic Principles –

Klaus H. Winkels – Secretary General

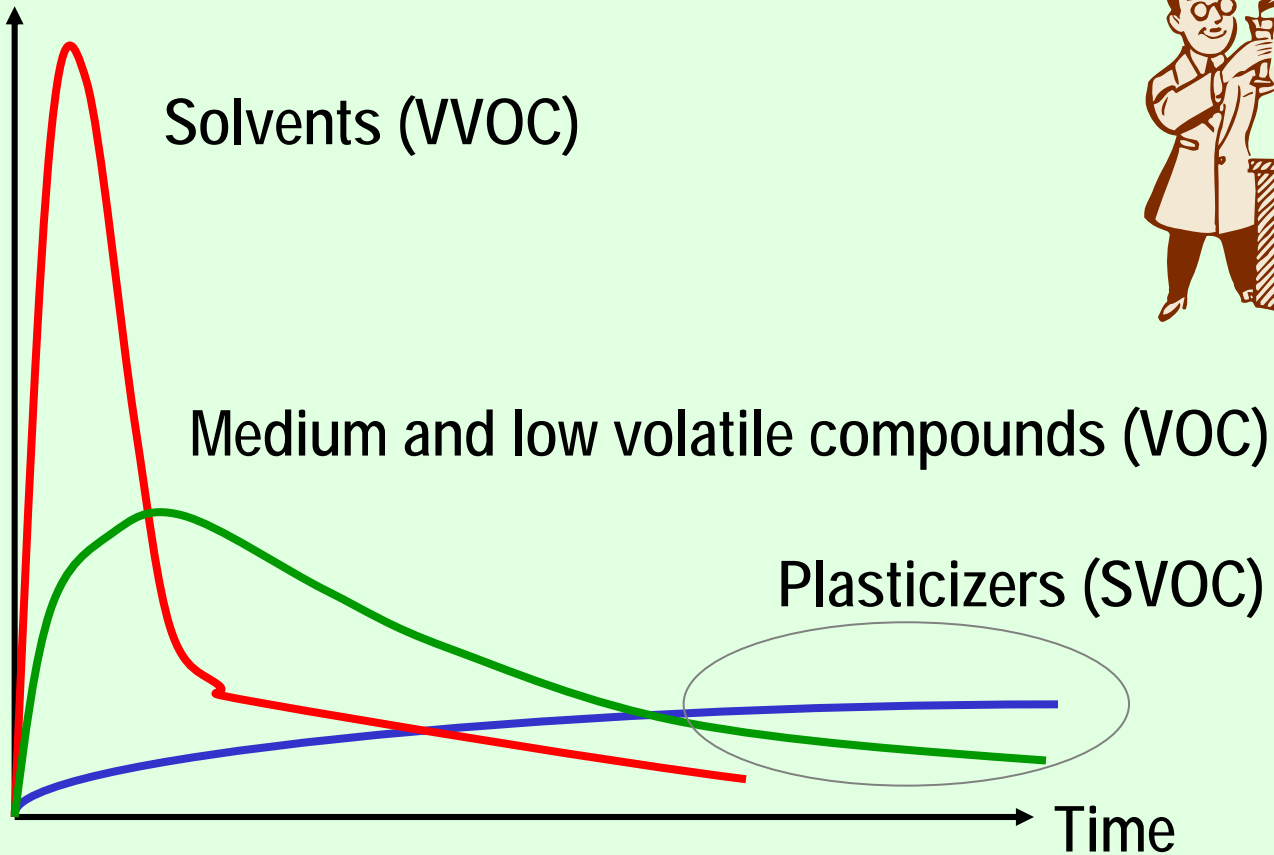


Consumption of Solvents in German Adhesives Industry



Characteristic decay curve of VOC of Adhesives, Coatings etc.

Concentration



What is EMICODE® ?





EMICODE® is the protected label of the GEV to indicate low emission products for flooring installation and building materials



EMICODE® classification Rules & Basics



1. **Be free of solvents with boiling point below 200 °C** 
2. **No use of toxic  ingredients and CMR substances**
3. **Safety data sheet must be available**
4. **Ban of CMR substances** (carcinogenic, mutagenic, reprotoxic)
Thresholds:
 - Cat. 1 substances: below 2 µg/m³ (detection limit)
 - Cat. 2 substances: below 10 µg/m³
 - Cat. 3 substances: below 50 µg/m³
5. **Determination of TVOC value**

EMICODE® classification



TVOC emission classes

- EMICODE EC 1 – „very low emission“
- EMICODE EC 2 – „low emission“
- EMICODE EC 3 – „not low emission“ (but solvent free)

**Products labeled with safety devices
for workers protection**



GEV-Test Method



1st sampling (24 hours)

Substances to be checked

Benzene C1

Acrylo amide C2

Acrylo nitrile C2

1.4-Dioxane C3

Vinyl acetate C3

Formaldehyde C3

Acetaldehyde C3

2nd sampling (10 days)

TVOC measurement

Which products may apply for EMICODE ?



EMICODE	EC1	EC2	EC3
1. Liquid products (i.e. primers)	≤ 100	$> 100 \leq 300$	> 300
2. Powder products (i.e. leveling products)	≤ 200	$> 200 \leq 600$	> 600
3. Pasty products (i.e. <u>adhesives</u>)	≤ 500	$> 500 \leq 1500$	> 1500
4. Underlays (i.e. membranes)	≤ 500	$> 500 \leq 1500$	> 1500
5. Joint sealants	≤ 300	$> 300 \leq 600$	> 600
6. Water based parquet coatings	≤ 150	$> 150 \leq 450$	> 450

Further Rules



Tests, licenses

- Every EMICODE labeled product needs a license from GEV office
- Prior to license application a product must be tested
- Principle of Self-responsibility and Self-classification
- Market control is performed via spot checks
- Violations will be penalized
- Alterations on products which are non-relevant with respect to emission behavior do not need another test
- EMICODE licenses may be transferred to non-members (private label)

Costs: Low budget



Membership

- For ordinary members the annual subscription is
 - up to 10 licenses 2,500 €,
 - 11 to 20 licenses 3,500 €,
 - 21 to 50 licenses 4,500 €,
 - more than 50 licenses 5,000 €.
- For supporting Members: 3,000 €
(Raw Material Suppliers)

Today – a story of success



- Highly respected and accepted standard for competent and responsible protection of the consumer and the environment
- More than 50 European companies (2 from US and Canada)
- More than 1,700 certified products
- Strong internal discipline
- Growing international reputation
- EMICODE EC 1 synonym for lowest possible VOC emissions

Information available



Information about EMICODE:

www.emicode.com



Registered name of the classification system