

## **Comparison Test on the Stripping Performance, Effectiveness and Speed on Different Coating Types between DCM and DCM-free Paint Strippers**

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'Substitutes for Paint Strippers containing Dichloromethane'

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## **Reasons for the Test**

- **Since years there was debate that certain coatings can only be removed by DCM-paint stripper because DCM free paint strippers don't work.**
- **The present TRGS 612 still includes exceptions (PVDF, Powder coatings, stove enamel) to permit the use of DCM paint strippers, based on above belief.**

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## Background

- The Test was carried out on behalf of the German Working Group TRGS 612 (Technical Rule for Hazardous Substances „Substitutes for Paint Strippers containing dichloromethane“)
- This working group advises the Committee on Hazardous Substances (AGS), which has to adopt TRGS before they are announced by the Federal Ministry for Economy & Labour
- The working groups of the AGS consists of all relevant groups involved such as
  - Decorator associations
  - Trade unions
  - Producers of paint strippers (with and without DCM)
  - Producers of dichloromethane and other solvents
  - ...

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## Scope of the Test

- **13 different paint strippers**
  - 2 DCM paint strippers
  - 11 Paint strippers without DCM
- **22 different coating types on metal sheets**
- **Application on 24 January 2005 / 15:00 – 17:00**
- **Inspection on 25 January at 9:30 am**
- **Room temperature ranges:**
  - Day 8 – 9°C
  - Night 5°C

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The following coatings were not tested

**Dispersion paint**

**Oil paint**

**Alkyd resin laquer**

**Latex paint**

**Polyurethan laquer**

because all parties involved agreed upon,  
that these coatings  
can be removed with DCM-free strippers.

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## Results

	DCM-free	with DCM
<b>2-Component Epoxy</b>		
Disboxid	-	-
Disboxid 444/Dispopox 447	+	-
Sikafloor 2530	+	+
Sikafloor 261	+	+
<b>Thermal cure</b>		
(Coil, enamel, powder)		
PVDF	-	-
Colorcoat HPS 200	+	-
Polyester	-	-
Interpon	+	+
Plastophen H-S	+	+

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## Conclusion

**Every coating,  
that can be removed  
with a DCM paint stripper,  
can also be removed,  
using a DCM free paint stripper**

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## Outlook

**The results became part of the new TRGS 612, which  
will be adopted by the AGS end of November 2005.**

4.1(1) TRGS 612

**For all coatings, which can be removed  
with a DCM paint stripper,  
suitable effective DCM free paint strippers  
are available on the market,  
and can fulfil the technical requirements.**

**Alone the compliance with existing regulations makes  
the use of DCM free paint strippers more economical.**

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