
CPD (Construction products directive): Indoor Air

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1. **How to measure indoor air pollution?** Here the AgBB-scheme
2. **The AgBB scheme**
Degassing in a closed cell (23°C, defined air exchange, ..)
Measurement of degassed substances after 3 and 28 days
Assessement for toxicity of known and unknown substances above 5 ug/m³

Question: Which carcinogens? EU-67/548/EWG cat 1 and 2

More details: <http://www.umweltbundesamt.de/bauprodukte/agbb.htm>

3. Some PVC-specific results (high surface per volume products)

3.1 Wallcoverings from two PVC coverings

Criterion	Result	Accepted limit	Product acceptable?
TVOC _{3d}	1,662/0,121 mg/m ³	10 mg/m ³	Yes
Carcinogens _{3d}	<0,001 mg/m ³	0,01 mg/m ³	Yes
TVOC _{28d}	0,024/0,006 mg/m ³	1 mg/m ³	Yes
SVOC _{28d}	<0,001/0,003 mg/m ³	0,1 mg/m ³	Yes
Carcinogens _{28d}	<0,001 mg/m ³	0,001 mg/m ³	Yes
NIK-assessable substances _{28d}	0,36/0,0	1	Yes
Non assessable substances _{28d}	0,005/0,003 mg/m ³	0,1 mg/m ³	Yes

3. Some PVC-specific results (high surface per volume products)

3.2 PVC floorings (homogen, heterogen, CV, linoleum)

Criterion	Result	Accepted limit	Product acceptable?
TVOC _{3d}	0,006/0,7/0,12/0,5 /3,8/0,3 mg/m ³	10 mg/m ³	Yes
Carcinogens _{3d}	<0,001 mg/m ³	0,01 mg/m ³	Yes
TVOC _{28d}	0/0,4/0,09/0,2 /0,16/0,12 mg/m ³	1 mg/m ³	Yes
SVOC _{28d}	0/0/0/0/0/0 mg/m ³	0,1 mg/m ³	Yes
Carcinogens _{28d}	<0,001 mg/m ³	0,001 mg/m ³	Yes
NIK-assessable substances _{28d}	0/0,6/0,13/0,05/0/ 0,24	1	Yes
Non assessable substances _{28d}	0/0/0/0,03/0/0,07 mg/m ³	0,1 mg/m ³	Yes

4. Conclusions

- No carcinogens detected
- Modern PVC-recipes can pass limit values
- Products with high surface area (most critical) pass limit values
- VOCs after 28 days strongly reduced
- For good products measurements after 3 days are sufficient (criteria for end of measurement possible)