

Mold Odor from Wood Treated with Chlorophenols Despite Mold Growth That Can Only Be Seen Using a Microscope

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File S1. Literature search on relations between chlorophenols, chloroanisoles and mold

Web of Science and PubMed were searched using the search string: “(mold OR mould OR mildew) AND (chlorophenol: OR monochlorophenol: OR dichlorophenol: OR trichlorophenol: OR tetrachlorophenol: OR pentachlorophenol: OR chloroanisole: OR monochloroanisole: OR dichloroanisole: OR trichloroanisole: OR tetrachloroanisole: OR pentachloroanisole:)”. In addition to the chemical names, all relevant CAS numbers (Table S1) were included in the search. The search was performed on 16 October 2023.

Table S1. Chlorophenol (CP) AND chloroanisole (CA) congeners and their Chemical Abstract Service Registry (CAS) numbers.

Chlorophenol	CAS no.	Corresponding chloroanisole	CAS no.
Monochlorophenols			
CP	25167-80-0		
2-CP	95-57-8	2-CA	766-51-8
3-CP	108-43-0	3-CA	2845-89-8
2-CP or 3-CP	29353-84-2		
4-CP	106-48-9	4-CA	623-12-1
Dichlorophenols			
diCP	25167-81-1		
2,3-diCP	576-24-9	23-diCA	1984-59-4
2,3-diCP or 2,4-diCP	83700-00-9		
2,4-diCP	120-83-2	2,4-diCA	533-82-2
2,5-diCP	583-78-8	2,5-diCA	1984-58-3
2,6-diCP	87-65-0	2,6-diCA	1984-65-2
3,4-diCP	95-77-2	3,4-diCA	36404-30-5
3,5-diCP	591-35-5	3,5-diCA	33719-74-3
Trichlorophenols			
triCP	25167-82-2		
2,3,4-triCP	15950-66-0	2,3,4-triCA	54135-80-7
2,3,5-triCP	933-78-8	2,3,5-triCA	54135-81-8
2,3,6-triCP	933-75-5	2,3,6-triCA	50375-10-5
2,4,5-triCP	95-95-4	2,4,5-triCA	6130-75-2
2,4,6-triCP	88-06-2	2,4,6-triCA	87-40-1
2,4,?-triCP 1	95719-03-2		
3,4,5-triCP	609-19-8	3,4,5-triCA	609-19-8

Chlorophenol	CAS no.	Corresponding chloroanisole	CAS no.
Tetrachlorophenols			
tetraCP	25167-83-3		
2,3,4,5-tetraCP	4901-51-3	2,3,4,5-tetraCA	938-86-3
2,3,4,6-tetraCP	58-90-2	2,3,4,6-tetraCA	938-22-7
2,3,5,6-tetraCP	935-95-5	2,3,5,6-tetraCA	6936-40-9
2,4,?,?-tetraCP 1	95719-04-3	2,3,5,6-tetraCA	6936-40-9
Pentachlorophenol			
PCP	87-86-5	PCA	1825-21-4

¹? means unspecified position of the carbon.

Results

Web of Science

The search in Web of Science resulted in 34 hits, listed below. None of the 34 studies addresses odor from PCs/CAs in relation to the extent of mold on treated wood. One study [12] describes visible mold in wine cellars, but not on CP-treated wood. Four of the papers [11,17-19] are cited in our manuscript for other reasons.

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PubMed

The search in PubMed resulted in 542 hits (not shown). Of these 542 papers, 28 remained (listed below) after excluding studies based on title. Based on full papers [8,9,16,17,21,23] or abstracts (remaining papers), none of the 28 studies addresses odor from PCs/CAs in relation to the extent of mold on treated wood. One study [9, same as 12 in the Web of Science search] describes visible mold in wine cellars, but not on CP-treated wood. Three studies [8,16,17] are cited in our manuscript for other reasons. Notably, only 12 of the 34 hits in Web of Science [5,6,8,11,12,16,18,19, 24,25,28,30] were found among the 542 hits in PubMed.

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