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WOOD PRESERVATIVES PREPARED FROM ELECTRICAL AND COOLING WASTES

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ABSTRACT

Reinprecht L. & Kizlink J. **Wood Preservatives Prepared from Electrical and Cooling Wastes**

Application of some waste substances (copper and glycols) obtained from electrical and cooling waste mixtures for the purposes of wood preservatives is described. Waste glycols "Alycol and Fridex" were modified with boric compounds (B-glycol-complexes), or also with copper compounds (Cu-B-glycol-complexes), together with the QAC fungicide and some other additives. Efficacy of these complexes against wood destroying fungi *Coniophora puteana* and *Trametes versicolor* was tested by the method of "poisoned impregnated papers". Anti-fungal effect of the Cu-B-glycol-complexes was quite comparable with the used standard Wolmanit CX-H 200. Copper had an apparent effect against growth of fungi, comparing the Cu-B-glycols (No. 11–13) with the B–glycols (No. 4–10). The QAC in these complexes increased their efficacy mainly against the white-rot fungus *T. versicolor* (No. 11–13). On the other hand, complexes based on the waste copper "$CuCO_3$.$Cu(OH)_2$-or-$CuCO_3$-H_3BO_3-ethanolamine-glycol-Cu(water-waste)" without the QAC were a little less effective (No. 14–16).

Key words: electrical and electronical wastes, copper complexes, glycol, wood destroying fungi, screening test, growth inhibition