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**USE OF REGENERATED SOLVENTS IN THE PRODUCTION OF INDUSTRIAL ENAMELS AND PRIMERS**

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*The aim of the work is to identify current trends in the paint and coatings industry in the context of the global sustainable development strategy and the implementation of green chemistry principles. Economic and environmental challenges are analysed, in particular the rising cost of raw materials, stricter environmental legislation requirements and problems related to the disposal of hazardous waste. The importance of paint and varnish materials in industry and their contribution to the formation of volatile organic compounds that affect the environment and human health are highlighted. In particular, it is shown that, taken together, the existing challenges create triple pressure on manufacturers of industrial paints and varnishes: economic (rising costs), regulatory (increased requirements) and environmental (responsibility for waste). It is noted that solvent regeneration technology offers a comprehensive solution to these problems, transforming disposal costs into an additional source of raw materials, reducing dependence on market price fluctuations and ensuring compliance with strict environmental standards.*

*The need to reduce the resource dependence of production and transition to the principles of a circular economy is emphasised. Particular attention is paid to the sources of formation and component composition of spent solvents in the production of paint and varnish materials. An overview of modern methods of solvent regeneration as key areas of greening and improving the efficiency of paint and varnish production is presented. The need to search for innovative technologies – membrane, adsorption, extraction and, especially, hybrid methods, which combine the advantages of different processes and allow achieving high purity of regenerated solvents with minimal energy consumption, provide the possibility of dehydration, selective removal of impurities and complete closure of material flows.*

**Keywords:** paint and varnish materials, volatile organic compounds, waste solvents, regeneration, green chemistry, circular economy, sustainable development.

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