

# SOCIO-ECONOMIC ANALYSIS OF A PROPOSED HARMONISED CLASSIFICATION OF ROSIN AND ROSIN DERIVATIVES: BRIEF SUMMARY

## Context and purpose of this document

Rosin<sup>1</sup> and its derivatives are highly versatile and used across many sectors relevant to the chemicals industry. Rosin is currently classified as Skin Sensitiser 1 (H317, may cause an allergic skin reaction) under Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of substances and mixtures (CLP Regulation).<sup>2</sup>

In September 2025, a draft Harmonised Classification and Labelling (CLH) dossier was published for the proposed classification of rosin as a reprotoxicant category 1B (Repr. 1B, H360Df) and several derivatives as Repr. 1B or 2, substance dependent.

This brief summary should be read in conjunction with the full report '**Socio-economic analysis of a proposed harmonised classification of rosin and rosin derivatives**' (dated 19 June 2026). This document serves as a standalone summary of the key findings and conclusions. The methodology and full quantified assessments, including the balance of costs and benefits, are included in the main report.

On scoping, the study examined impacts across rosin group 1 'rosin acids, hydrogenated rosin acids, salts', rosin group 3 'rosin acids, fumarated/ maleated, salts' and rosin group 4 'esters from rosin acids, fumarated/ maleated'. There were two policy scenarios: all substances are classified as Repr. 1B, and all substances are classified as Repr. 2. Upstream impacts were investigated at the level of rosin and rosin derivatives manufacture, and across five downstream sectors: adhesives, coatings, inks, paper sizing, and rubber and tyres.

The study draws upon standard SEA methodologies. Impacts on the rosin and rosin derivatives market were quantified for the portfolio of products affected and estimated the potential contraction in sales turnover and trade. Impacts further downstream were quantified for reformulation and adaptation costs, and potential market contraction. Any health and environmental impacts were assessed qualitatively.

## Results at a glance

The analysis concludes that the harmonised classification of rosin and rosin derivatives, as category 1 or 2, could impose substantial costs on EU industry and the wider economy, whilst delivering only modest and uncertain human health benefits. In addition, negative environmental impacts could be associated with these options, if petrochemical-based alternatives are used to replace rosin.

## Results in more depth

The socio-economic analysis conducted finds that the proposed harmonised classification of rosin and rosin derivatives as toxic to reproduction could generate negative economic impacts across the EU rosin value chain. The analysis indicates that Policy Scenario 1 would result in a material structural disruption, while Policy Scenario 2 could lead to more limited effects.

Whilst there is no human data available for the relevant exposure pathways to quantify potential health impacts, qualitatively, any potential burden of health attributable to rosin exposure would fall on a relatively small proportion of EU workers. In this context, the qualitative assessment concludes that the

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<sup>1</sup> EC no: 232-475-7, CAS no: 8050-09-7

<sup>2</sup> European Commission (2008). Regulation (EC) 1272/2008 on classification, labelling and packaging of substances and mixtures. Available at: [Regulation - 1272/2008 - EN - clp regulation - EUR-Lex](#)

proposed harmonised classification could generate net positive social impacts, especially from improved occupational health following a potential reduction in exposure.

The analysis also indicates that the proposed harmonised classification of rosin and its derivatives as toxic to reproduction could lead to unintended negative environmental impacts. This assessment is based on industry expectations that the primary substitutes for rosin and its derivatives are petrochemical-based alternatives. Consequently, increased reliance on such alternatives may result in higher greenhouse gas emissions.

The main impact conclusions are summarised in the Table below, with sensitivities considered and presented in the full report.

Table E-1: Summary of the estimated impacts of the two Policy Scenarios.

Impact	Policy Scenario 1	Policy Scenario 2
<b>Upstream sales reduction</b>	-70%	-3%
<b>Upstream turnover loss</b>	EUR 360 million annually	EUR 17 million annually
<b>Downstream turnover loss</b>	EUR 12 billion annually	EUR 550 million annually
<b>Upstream job losses</b>	-370 jobs	A few jobs
<b>Downstream job losses</b>	-77,190 jobs	-3,170 jobs
<b>Health impacts</b>	Reduction in occupational exposure through product withdrawals and market contraction	Benefits expected to align with Scenario 1, but to a lesser extent overall
<b>Environmental impacts</b>	Modest contraction of the rosin market could lead to increase reliance on petrochemical-based alternatives and increased GHG emissions	Potentially smaller increase in GHG emissions, based on the overall lower proportion of the affected portfolio of products

### Why this matters

- Rosin derives from three main routes – pine oleoresin tapping, as a by-product from the Kraft process, and from tree stumps. Its primary use is as an intermediate in the manufacture of rosin derivatives. These derivatives are used across important manufacturing value chains including adhesives, coatings, inks paper sizing and rubber/tyres.
- A stricter classification could trigger market disruption, reformulation costs, product withdrawals and job losses across the EU-27.
- Health gains appear limited in scale, as the number of cases of ill-health potentially attributable to rosin exposure in the baseline is likely low, based on the available evidence.
- Rosin resin is a renewable and sustainable material. Environmental impacts of relevant value chains are likely to worsen under a classification scenario if manufacturers switch from naturally derived rosin to petrochemical-based substitutes.

### Bottom line

Under both the policy scenarios, the assessment concludes that the scale of any potential benefits (primarily to human health) would be much lower than the costs (primarily to the economy and the environment). In other words, the benefit-cost ratio of both classification scenarios would be below 1 (with benefits lower than costs). Thus, these findings would not support the adoption of either classification scenario, either Repr. 1B or Repr. 2, considered in this Study.