



Formaldehyde – Benefits for economy and society

About formaldehyde

Formaldehyde is a natural metabolic intermediate and is produced by all living cells. Formaldehyde can be found in the blood of humans. Formaldehyde is broken down by sunlight and bacteria within a few hours and is quickly decomposed in the human metabolism process. That is why formaldehyde neither accumulates in the human body nor in the environment.

Formaldehyde: An indispensable all rounder

Formaldehyde is safely used in a wide range of everyday products – from healthcare to construction materials. For example insulation materials based on formaldehyde are indispensable for an energy efficient, low-carbon economy. Formaldehyde is also used in vaccines as a preservative to prevent bacterial or fungal contamination that could cause serious infections. Products based on formaldehyde also play an important role for innovative and high-tech applications such as landing gear, brake pads and tire cord adhesives in the aircraft industry.

Socio-economic impacts of formaldehyde

A study conducted in 2007 quantifies the value of formaldehyde to society and the contribution of the formaldehyde industry to the economies of the European Union and Norway. The results show not only the enormous economic significance of formaldehyde but also the benefits for consumers.

Saving consumers' money

Using formaldehyde and its derivatives in Europe rather than alternative products saves more than € 29 billion per year – not taking account of huge technical and supply issues.

Creating jobs in Europe

No less than 1.7 million people are directly employed throughout the European formaldehyde value-chain. They work in approximately 20,300 plants that are critically dependent on formaldehyde: 395 chemical processing plants and 19,900 fabrication plants primarily in the wood products and furniture industries. Employee wages amounted to over €42 billion for the year – an average of €24,300 per worker.

Contributing to Europe's economic prosperity

Almost €330 billion worth of sales resulted from the formaldehyde industry's activities. To illustrate, this sum equals the GDP of Belgium.

Formaldehyde and derivatives' production was carried out in facilities with an aggregate investment value of nearly €195 billion in the European Union and Norway.

Formaldehyde is consumers' first choice

Formaldehyde has unique qualities. Products with formaldehyde are stronger, lighter, easier to install or use, longer-lived, or more resistant to high temperatures and environmental stresses than those made of substitute materials. These qualities are valued by consumers. The substitution of formaldehyde is not only a question of losing money but also of forfeiting quality. The following examples show the large losses in utility consumers would suffer when using alternative materials.

Durable and versatile building materials

Formaldehyde resins are used as a binder or adhesive in wood-based panels. There are substitutes for each application but no substitute material has the broad range of properties of formaldehyde resins including low cost, dimensional stability, hardness, clear glue line, and fast curing time. Without formaldehyde resins, consumers would be forced to use more expensive, less versatile, and less durable materials or else switch to entirely different construction methods. In most cases, switching to different construction methods is a significantly more costly alternative.

Strong and safe materials for your car

Polyoxymethylene (POM) is a type of plastic derived from formaldehyde and widely used for example in the car industry. Because of its stability and its tolerance of high temperatures. POM is used in seat belt systems and other applications where quality is vital. There are substitutes for each of the various applications but no substitute material has the broad range of properties of formaldehyde-based materials where high strength, dimensional stability, the ability to resist water, and thermal stability are required.

FormaCare is committed to consumers' as well as workers' health and safety. Best practices in production and significantly decreased emissions make formaldehyde a safe choice for industry and consumers.

About FormaCare

As a sector group of Cefic (the European Chemical Industry Council), FormaCare represents key European producers of formaldehyde, aminoplast glues and polyols. FormaCare aims to promote the sustainable use of formaldehyde and formaldehyde-based products among its members and their customers, with due regard to health and environmental care.

Contact us

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