

新家具所釋出的揮發性有機化合物（或簡稱 VOCs）可能會影響室內空氣質素和用戶的健康，當中甲醛的影響至為重要。明智地選擇新家具以及採取減低 VOCs 的良好做法，有助減少對你處所的室內空氣質素造成不良影響。

什麼是 VOCs？對健康有何影響？

VOCs 包含各種可於室溫下揮發的有機化合物。在一般的室內環境中，有過百種化合物（包括甲醛）可歸類為 VOCs。除了新家具外，VOCs 可由多種不同的源頭釋出，包括化妝品、清潔劑、殺蟲劑及二手煙等。接觸 VOCs，可能會對健康構成急性或慢性的影響。足夠濃度的 VOCs 可引致眼睛、鼻子和喉嚨不適，甚至頭痛、暈眩、視力失常及其他多種傷害。有多種可於室內量度到的 VOCs，尤其是甲醛，已被公認為人類或動物的致癌物質。鑑於現時對 VOCs 及其混合物的毒理學認識還未足夠，最審慎的做法便是盡量減少與其接觸。



新家具如何釋出甲醛或 VOCs？

甲醛主要是由壓木板（如粒子板、中等密度纖維板和膠合板等）製成的家具產品所使用的粘合劑（如脲甲醛樹脂）釋出。甲醛的釋出量在產品新製成的最初數月為最高。之後，甲醛的釋出量會減慢和持續一段長時間，通常可維持數年。此外，VOCs 也會從家具的油漆、塗料和粘合劑所使用的有機溶劑釋出。

如何減少新家具的排放？

給消費者的提示：

- 除非絕對必要，否則不要更換舊家具。
- 選擇釋出較少甲醛及 VOCs 的實木家具。
- 選擇採用符合歐洲 E1、中國 GB18580-2017、日本 F2 星或其他同等標準的低甲醛木板所製成的家具。

- 避免選用無覆蓋的壓木家具製品。應選擇以膠板或防水物料覆蓋表面和邊緣的壓木製品，以減少釋出甲醛。
- 選擇以低 VOCs 產品製成的家具，如符合《空氣污染管制（揮發性有機化合物）規例》的油漆、塗料及粘合劑。
- 在合約或發票上指定使用低甲醛木板和低 VOCs 產品。
- 要求家具供應商或承辦商提供低甲醛木板和低 VOCs 產品的相關資料。

零售商如何協助：

- 引入低 VOCs 家具和低甲醛木板。
- 供應採用符合歐洲 E1、中國 GB18580-2017、日本 F2 星或其他同等標準的低甲醛木板所製成的家具。
- 從供應商獲取低甲醛木板和低 VOCs 產品的相關證書或實驗室報告，並展示予客人參考。

如何減少接觸新家具的排放？

良好的做法：

- 新家具最好放在室外至少數天或數周，然後才放入室內。你可考慮要求供應商，在家具送到你的處所前，放在室外吹散一段時間。
- 如情況許可，於入伙前數天或數周把新家具提前搬入。
- 常打開窗戶、增加冷氣機和通風系統的鮮風量，和開啟抽氣扇，確保處所有足夠通風。
- 在炎熱和潮濕的日子降低濕度和溫度，因濕度和溫度上升會增加甲醛的釋放。

如想得到更多資料，請聯絡：

室內空氣質素資訊中心
電話：2788 6177 傳真：2788 6181
電郵：enquiry@iaq.gov.hk
網址：http://www.iaq.gov.hk

New Furniture and Indoor Air Quality

新家具與室內空氣質素



Volatile organic compounds (VOCs) emitted from new furniture may affect indoor air quality (IAQ) and occupants' health, of which formaldehyde is of the major health concern. Wisely selecting furniture as well as good practices on diluting VOCs would help minimise the adverse impact of new furniture on the IAQ of your premises.

What are VOCs and their health effect?

VOCs are a diverse group of organic compounds that evaporate at room temperature. In a typical indoor environment, there are over a hundred compounds, including formaldehyde, that can be classified as VOCs, emitting from many sources other than new furniture, such as cosmetics, cleaning agents, pesticides and tobacco smoke. Exposure to VOCs may result in both acute and chronic health effects. In sufficient quantities, VOCs can cause eye, nose and throat irritations, headaches, dizziness, visual disorder, and many other impairments. Some VOCs, formaldehyde in particular, which have been measured indoors are known human or animal carcinogen. As existing knowledge of toxicological effects of VOCs and their mixtures is still incomplete, it is always prudent to minimise exposure to them.



How do formaldehyde or VOCs emit from new furniture?

Formaldehyde is mainly emitted from the adhesives, e.g. urea-formaldehyde resins, used in furniture products made of pressed wood panels, e.g. particle board, medium-density fibreboard and plywood. Emissions of formaldehyde are highest in the first few months when products are new, and then gradually reduce afterwards but will continue for a long period of time, often over a

number of years. VOCs are also emitted from the organic solvents used in the paints, coatings and adhesives applied on furniture as well.

How to reduce emissions from new furniture?

Tips for consumers:

- Do not replace old furniture unless absolutely necessary.
- Select solid wood furniture which emits relatively little formaldehyde and VOCs.
- Select furniture made of low-formaldehyde wood panels meeting European E1 standard, China GB18580-2017, the Japan F-Two Star, or similar standards.
- Avoid bare pressed-wood products and select those that are covered by laminate or water-repellent finish on the surfaces and edges to help reduce the emission of formaldehyde.
- Select furniture made of low-VOC products, e.g. paints, coatings and adhesives which are in compliance with the Air Pollution Control (Volatile Organic Compounds) Regulation.
- Specify the use of low-formaldehyde wood panels and low-VOC products in service agreements or invoices.
- Request suppliers or contractors to provide information of low-formaldehyde wood panels and low-VOC products.

How retailers can help:

- Source for low-VOC furniture and low-formaldehyde wood panels.
- Offer furniture made of low-formaldehyde wood panels meeting European E1 standard, China GB18580-2017, Japan F-Two Star or similar standards and low-VOC products.
- Collect from suppliers' relevant certificates or laboratory test results of low-formaldehyde wood panels and low-VOC products and show them to customers.

How can I reduce exposure to emissions from new furniture?

Tips of good practices:

- Air out new furniture for at least several days or weeks before placing it indoors. You may consider asking your supplier to have them aired prior to delivery to your premises.
- Whenever possible, allow early move-in of new furniture to the premises at least several days or weeks before occupation.
- Ensure adequate ventilation in the premises by opening windows, increasing fresh air intake of air conditioners or ventilation systems, and switching on exhaust fans.
- Reduce humidity and temperature on hot and humid days as emission of formaldehyde increases with humidity and temperature.

For more information, please contact:

Indoor Air Quality Information Centre

Telephone: 2788 6177 Facsimile: 2788 6181

E-Mail: enquiry@iaq.gov.hk

Website: <http://www.iaq.gov.hk>

