Recent food contact materials coverage by Chemical Watch
Monitor regulatory activity for food contact materials with Chemical Watch

Chemical Watch is the leading global provider of independent intelligence and insight for product safety professionals managing chemicals.

This means that we can help you stay up to date with the rapidly changing regulatory landscape and compliance best practice, allowing you to make well-informed decisions, and identify opportunities for and threats to your business.

Food packaging is crucial for safe and effective delivery of food from farm and factory to fork. But the food contact materials (FCM) used and their composition have, in recent years, become an increasing source of concern, not least because products such as cookware and food packaging can contain types of per- and polyfluoroalkyl substances (PFASs).

Concerns over the chemicals that go into FCMs have led to a flurry of regulatory action, much of it piecemeal and some overarching.

Chemical Watch has been monitoring the issues surrounding FCMs and PFASs for a number of years. Our team of expert journalists have written about every aspect of the debate, including the science, regulatory considerations and industry drivers. This means that we are able to provide an unrivalled level of detail and scrutiny of the regulatory process to the many customers that rely on our reporting.

Here we have handpicked a selection of recent articles that cover FCMs around the world – including the recent news that California has joined a growing list of US states to ban the use of PFASs in certain food packaging; and an in-depth article exploring plans in Asean countries for FCM regulation.

Alongside our News & Insight content, our regular conferences and training courses on FCMs are an invaluable source of the latest information for professionals managing chemicals in the sector, providing regulatory updates and perspectives from industry, as well as unique networking opportunities.

We hope you find these articles useful and look forward to seeing you at one of our events soon.

Please let us know if you’d like to know more about our coverage of FCMs or about our events and training courses. We’d be happy to discuss how we can help.

The Chemical Watch team
Japan's Ministry of Health, Labour and Welfare (MHLW) has added 411 further substances to its food contact materials (FCMs) positive list, bringing the total to 4,497, and amended the requirements for some substances already listed.

The revised list was published on 18 August on the ministry's website. The list provides chemical names in English, along with the Cas numbers of listed substances and requirements such as the maximum temperature conditions of use. The revisions also divide the substances into four categories:

- polymer plastics;
- polymer coatings;
- polymer trace monomers; and
- additives.

“The list was updated and amended after taking into consideration the comments from the industry and companies for about one year,” Isurugi Masakazu, information research and publicity office manager from the Food Contact Material Safety Centre, told Chemical Watch. The comment period ended on 30 October last year. And “there is a possibility of more updates in the future to include other substances that were not included,” he added. The list was last updated in July 2020.

The ministry published its first draft list of substances under the amended Food Sanitation Act of Article 18(3) in April 2020. The list and its requirements took effect on 1 June 2020, but companies have been granted a five-year transition period until 31 May 2025. Enforcement is set to begin from 1 June 2025.
China's National Health Commission has published a revised food contact standard that sets out the methods required for testing the overall migration of food contact materials (FCMs).

The National Food Safety Standard for Food Contact Materials and Articles – Determination of Overall Migration (GB 31604.8-2021) will come into force on 7 March 2022, repealing and replacing the existing standard (GB 31604.8-2016).

The revision adds updated requirements on the precise methods for determining overall migration of FCMs.

The standard also expands the scope of the original to include vegetable oils as food stimulants and adds a new method for the determination of overall migration of olive oil as a food stimulant.

This standard is important as it is often referenced in other FCM standards, said an industry expert who wished to remain anonymous.
ClientEarth has urged investors and asset managers to step away from food companies that use plastic packaging containing potentially harmful chemicals, warning of regulatory, reputational and liability risks.

The NGO's 9 September investor brief highlighted the effects that plastic packaging has on waste, climate and health.

It claimed major food manufacturers and grocery retailers – termed 'Big Food' – are not doing enough to address these risks, and investors are likely to suffer from being associated with plastic food packaging and those that produce or use it.

ClientEarth said consumer awareness of potentially hazardous chemicals in plastics and their unknown effects poses a reputational risk to investors. The brief highlighted endocrine disrupting chemicals (EDCs), phthalates and per- and polyfluoroalkyl substances (PFASs) as harmful compounds in plastics.

It said consumers are increasingly aware of chemical safety issues linked with plastics and food packaging, and Big Food is most at risk from the public backlash. "These are, after all, the companies in which there is the highest expectation of safety," ClientEarth said.

The NGO warned of liability risks and negative publicity if investors are associated with companies using and producing plastic packaging that contains high profile chemicals, such as PFASs.

"Big Food would be well advised to keep a close eye on litigation relating to PFASs in the US, as this provides a comparable example of how liability for hazardous chemicals used in plastic packaging could develop in time," it said.

PFASs have been subject to numerous lawsuits against chemical manufacturers in the US. Some giants in the food industry, such as McDonald's, Wendy's and Restaurant Brands International – the parent company of Burger King, Tim Hortons and Popeyes – are working to eliminate the chemicals from their food packaging.

ClientEarth hinted at EDC-related claims in the making. "Mutual health insurance funds are mobilising to improve awareness of EDCs among consumers and provide information regarding sources of exposure," it said. It
quoted a 2020 paper by Independent Health Insurance Funds, which estimates that the health costs caused by exposure to EDCs amount to at least €163m per year in Europe.

And ClientEarth named the EU chemicals strategy for sustainability as a gateway to more rigorous regulation of chemicals in consumer products.

In the short to medium term, some of the current formulations of single-use plastic packaging will no longer be permitted and substituting alternative substances is not always an alternative, ClientEarth said.

The disruption will affect the carefully honed packaging processes of Big Food and harm investors in the process, it added.

ClientEarth called on investors to either stop investing in the sector to avoid financial consequences for their businesses or request better performance.

The report pushes investors to engage with retailers to “demand more transparency on their exposure to risks relating to single-use plastics, challenge the ambition of corporate targets, and scrutinise the adequacy of the policies in place to achieve them”.

Pressure from investors on companies to curb problematic substances has been on the rise.

Last year, NGO ChemSec launched a ranking system of the world’s biggest chemical companies with the specific aim to drive investors towards those in the industry that make the most efforts to reduce their production of hazardous chemicals.

In July, credit rating agency Moody’s published the results of a screening of more than 20 PFAS producers worldwide, which found they are slow to mitigate the growing legal, financial and reputational risks associated with the substances.
California has joined a growing list of US states to ban the use of per- and polyfluoroalkyl substances (PFASs) in certain food packaging, and has also gone a step further by imposing new chemical disclosure requirements for cookware.

With Governor Gavin Newsom’s 5 October signature, the measure (AB 1200) will prohibit from 1 January 2023 the sale or distribution of PFAS-containing paper and other plant-based food packaging, such as take-out containers, liners, wrappers, disposable plates and straws.

States like Maine, New York and Washington have also moved to regulate the persistent substance class in these applications, amid growing concern about their widespread presence in the environment and potential human health implications.

Unique to California’s law, however, is a chemical disclosure mandate for cookware products, including pots, pans, skillets, grills, baking sheets, baking moulds, trays, bowls and cooking utensils.

From 1 January 2023, cookware manufacturers will need to provide disclosure on an internet website if their product contains in its handle or a cooking surface any of hundreds of chemicals included on the California Department of Toxic Substance Control’s (DTSC) candidate chemicals list (see box).

On-product labelling requirements kick in one year later. The legislation also looks to tackle what bill backers called “misleading statements” about products being ‘free from’ certain chemicals. Beginning in 2023, cookware manufacturers will no longer be permitted to claim that a product is free from a certain substance if it contains a different substance from the same class, for example saying a product is perfluorooctane sulfonate (PFOS)-free when it contains a different PFAS.

“Dangerous chemicals should not be wrapped around our food or leaching into our food from our pots and pans at home,” said Assembly member Phil Ting, the bill’s sponsor. “By passing AB 1200, California can assess chemicals that our families are ingesting so that they cannot further damage our health and the environment.”
Mr Ting co-authored two other measures addressing PFASs that were also signed into law on 5 October. AB 652 will prohibit use of the substances in juvenile products, while AB 1201 will no longer allow products to be labelled as ‘compostable’ if they contain PFASs.

The governor also signed another bill that could discourage the use of PFASs in recyclable products. SB 343 would prohibit companies from labeling their products as recyclable if the product or its packaging contain intentionally added PFAS above 100 parts per million (ppm), as measured in total organic fluorine.

Labelling requirements

The DTSC's candidate chemical list, also known as the 'list of lists', draws from 23 US and international 'authoritative lists', such as California's Proposition 65 list of carcinogens and reproductive toxicants, the EU's list of endocrine disruptors, and substances identified as group 1, 2A or 2B carcinogens by the International Agency for Research on Cancer (Iarc).

The candidate chemical list is updated when there are changes to the referenced authoritative lists, and currently contains roughly 2,300 substances.

Under California's newly adopted law, cookware manufacturers will need to provide online disclosure for all listed chemicals used in their products, as well as details and links to the authoritative list(s) the DTSC references for each substance.

From 2024, products must also be labelled with a list of all disclosable chemicals, as well as a QR code directing consumers to the internet webpage for additional information. Cookware sold online must include the disclosure alongside other product information.
India reverses ban on using recycled plastic in FCMs

14 October 2021

Amendment to packaging rules does not include chemical migration limits

India is now allowing the use of recycled plastic in food contact materials (FCMs), overturning a regulation that banned the practice in 2018. But the new rules do not include chemical migration limits, meaning that manufacturers could recycle plastics containing harmful substances and then use them to package food.

The reversal came in a Ministry of Environment, Forest and Climate Change (MoEFCC) amendment to the country’s rules on plastic waste management, which was announced on 17 September and came into effect six days later.

It supersedes a Food Safety and Standards Authority of India (FSSAI) ban on the use of recycled plastic as an FCM in 2018 – brought in via the Food Safety and Standards (Packaging) Regulation. This required all virgin plastic used as a food packaging material to meet a total substance migration limit of 60 milligrams per kilogram (mg/kg), with no visible migration of colour. It also outlined the following maximum migration limits for individual substances:

- barium – 1mg/kg;
- cobalt – 0.05mg/kg;
- copper – 5mg/kg;
- iron – 48mg/kg;
- lithium – 0.6mg/kg; and
- manganese – 0.6mg/kg.

But the amendment on recycled plastics does not include these limits. The provisions of the Plastic Waste Management (Second Amendment) Rules state that “recycled plastic may be used for storing, dispensing, packaging of ‘ready-to-eat’ foodstuffs and drinks subject to appropriate standards and regulation” drawn up by the FSSAI – India’s competent authority on food safety.

Overriding previous proposals

Last month, the FSSAI issued a draft proposal seeking to set further migration limits for substances including antimony, phthalic acid and bis-phthalate in virgin plastic used for drinking water packaging. If the scope of the recycled plastics amendment includes such packaging, it would override this proposal.

The FSSAI noted that, in a July guidance document, India’s Food and Drugs Administration (FDA) said: “The possibility that chemical contaminants in plastic materials intended for recycling may remain in the recycled material and could migrate into the food the material contacts is one of the major considerations for the safe use of recycled plastics for food-contact applications.”

The document – Guidance for Industry: use of recycled plastics in food packaging (chemistry considerations) – made clear that it was the FDA’s “current thinking on the topic and should be viewed only as recommendations and do[es] not establish legally enforceable responsibilities”. The guidance says recyclers of plastics that are intended to come into contact with food need to submit information on their process to the FDA for evaluation and comment, but this is not a legally binding requirement.
It is three years since the Association of South-East Asian Nations first published the General Guidelines on Food Contact Materials (General Guidelines), in which it stated its intention to “prioritise and establish” a schedule for the development of specific measures for FCMs. That publication was followed in 2019 by the Guidelines for Good Manufacturing Practice for Food Contact Materials (GMP Guidelines).

Since then little information has been made available on Asean’s plans – or the schedule to implement them. Chen Hu, staff scientist at international law firm Keller and Heckman’s Shanghai office, says the whole process could take many years: “The development of technical regulations in Asean countries is usually a long and slow process.” Meanwhile, EU regulations on some groups of FCMs are yet to be finalised, adding to Asean’s schedule. “We speculate that the Asean measures would be developed based on their EU counterparts,” he said. “It is unlikely that Asean will publish the measures on these groups before the corresponding EU regulations are adopted.”

Harmonisation
Asean’s Consultative Committee on Standards and Quality (ACCSQ) established the Prepared Foodstuff Product Working Group (PFPWG) to assist it in identifying specific areas for harmonisation of prepared foodstuff standards. Harmonisation of national with international standards is a key goal of the ACCSQ, which operates under the purview of the Asean economic ministers and is tasked with addressing the removal of technical barriers to trade in order to realise the goals of the Asean free trade area (AFTA). The PFPWG, which produced both the General and GMP Guidelines, is one of six product working groups established by the ACCSQ in pursuit of harmonisation.

The guidelines were both published on the Asean website earlier this year (12 April). Asean recommends industry stakeholders use them together as part of ongoing efforts to meet global standards and promote responsible, sustainable investment.

While the General Guidelines serve as a reference for member countries working on food safety across the region, the GMP Guidelines prescribe general principles and requirements to ensure good manufacturing practice (GMP) for FCMs placed on the market in South-East Asia.

Specific measures
Included in the General Guidelines are the PFPWG’s proposals for specific measures for 17 groups of FCMs that Asean member states could adopt. Mr Hu says the groups listed are identical to those covered by the EU’s Framework Regulation (Regulation (EC) No 1935/2004) and that a number of terms used are the same as in the EU’s regulations.

No information is available on procedures for conducting risk assessments of substances used in the manufacture...
of FCMs. But according to the General Guidelines, compliance testing may include, as appropriate:

- material tests to verify composition, identify type of materials or determine purity;
- overall migration tests; and
- specific migration tests.

“Our speculation is that the restrictions and limits may be similar to those in the relevant EU regulations,” adds Mr Hu.

The EU has provided technical assistance through the Asean Regional Integration Support by the EU (Arise) Plus programme, including helping the ACCSQ with the production of the guidance documents on standards, conformity assessment, accreditation and technical regulations.

On page 43 of the Arise Plus workplan (8 May 2020 to 7 May 2021), the authors note: "For the PFPWG, work on the development of the implementing procedures for the mutual recognition agreement on prepared foodstuffs has been completed. Work is ongoing on the harmonisation of food additives, food contaminants, nutrition labelling and food contact materials."

**Harmonised standards**

Asean has its own guidelines on the harmonisation of standards (see attached). And “each member state may also have its own laws and regulations to adopt and convert the Asean measures to national legislation,” says Mr Hu.

The measures recommended are likely to be implemented in member states once each Asean state has published them, he adds. According to the General Guidelines: "Member states should carry out official controls in order to enforce compliance with this guideline in accordance with provisions of relevant laws."

The Asean Secretariat and individual members of the PFPWG did not respond to Chemical Watch enquiries on the status of the Asean FCM measures.

**Restrictions and limits**

For the groups of FCMs listed in the General Guidelines, the PFPWG proposes specific measures that Asean member states could adopt.

These include developing a positive list, containing starting substances authorised for use in the manufacturing of FCMs. Recycled materials would only be allowed when proof of safety is provided. They would be subject to member state regulations. The starting substances on the list would be subject to purity standards and specific conditions for use.

The PFPWG also says that measures would stipulate specific limits on the migration of certain constituents or groups of them into or onto food. According to the General Guidelines, they would take into account other possible sources of exposure to those constituents. And they would set overall limits on their migration into or onto food. Rules would be established to ensure compliance with these.

The General Guidelines also propose rules concerning:

- the inspection and collection of samples and the methods of analysis to check for compliance;
- specific provisions for ensuring the traceability of FCMs, including provisions on how long records must be retained; and
- provisions requiring the Asean member states to establish and maintain a publicly available register of authorised substances, processes, or materials or articles.

**General principles and requirements**

In the general principles and requirements section of the PFPWG’s General Guidelines, the authors say all FCMs should be manufactured in compliance with good manufacturing practice (GMP) so that under normal or foreseeable conditions of use, they do not transfer their constituents to food in quantities which could:

- endanger human health;
- bring about an unacceptable change in the food; and/or
- bring about unacceptable changes in the organoleptic characteristics thereof.
The section also stipulates that the safety of FCMs should be determined by risk assessments of substances. And that FCMs authorised by national/regional authorities may be considered to be safe upon review of relevant risk assessment results and/or of approvals granted by those authorities.

The General Guidelines state that substances used in the manufacture of FCMs, and FCMs in their finished state, will have to comply with the requirements that apply in the member states in which they are placed on the market.

**Asean member countries**

The Association of South-East Asian Nations, or Asean, is an economic union that was established in 1967. It has ten members: Brunei; Cambodia; Indonesia; Laos; Malaysia; Myanmar; Philippines; Singapore; Thailand; and Vietnam.

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