

Brominated Vegetable Oils (BVO) in Foods

**Trade Consultation Forum
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Background

- In early May 2014, media reported two global beverage manufacturing companies' announcement on their plan to stop using BVO in all their drinks in response to consumers' concern.

Application of BVO

- A bromine addition product of vegetable oils
- Used as cloud producing agent, emulsifier and stabiliser in fruit-flavoured beverages (INS 443), including
 - Keep flavour oils in suspension
 - Give a cloudy appearance

Toxicity of BVO

- The safety of BVO has been evaluated by JECFA in 1970

- Observations from short-term studies
 - High doses of BVO could cause degenerative cardiac lesions in experimental animals
 - Accumulation of lipid and lipid-bound bromine was shown in adipose tissue and in intracellular fat of various other tissues in human and experimental animals

Toxicity of BVO

- JECFA concluded that BVO should not be used as food additives in the absence of evidence indicating its safety
- JECFA has not re-evaluated BVO since then

Health-based Guidance Value

- The absence of a “no-effect level” based on long-term studies precluded the establishment of an Acceptable Daily Intake (ADI) for BVO

Regulation of BVO in Foods

Not on the list of food additive	Can be used as food additive
Codex	USA <ul style="list-style-type: none">• On an interim basis• ≤ 15 ppm in finished fruit-flavoured beverages
Mainland China	
European Union	
Australia & NZ	Canada <ul style="list-style-type: none">• ≤ 15 ppm in beverages containing citrus or spruce oils as consumed
Japan	
Singapore	

Regulation of BVO in Foods in HK

- All foods for sale must be fit for human consumption

- FEHD has adopted JECFA's view that BVO should not be permitted to be used in foods
 - Safety evaluation conducted by JECFA
 - Alternatives are available in the market which can achieve the technical functions of BVO in beverages

Regulation of BVO in Foods in HK

□ Latest situation

- Continue to conduct surveillance of BVO in foods in the local market

□ Other substances sharing similar characteristics, e.g.

■ Potassium bromate (INS 924a)

- Codex has not included provision for its use as flour treatment agent
- Not included in the list of permitted food additives in flour in Mainland China, Australia and New Zealand, EU and Canada

Other Food Additives Not Permitted for Food Use in HK

Examples

- ❑ Preservatives (regulated under Cap.132BD)
 - ❑ e.g. boric acid, salicylic acid, formaldehyde
- ❑ Colouring matter (regulated under Cap.132H)
 - ❑ e.g. red 2G

Thank you

