

Chemical Categories and Classification Schemes

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Where are substances classified by law?

 European directives e.g. **EN71 (Toy Safety), RoHS** (Electricals)

German Chemicals Act

Japanese law

California Proposition 65

Food & Commodities Law (LMBG)

Other national laws







































Business for Social Responsibility

Chemical Categories

What are the consumer classification schemes?



SG Label

TUV Toxproof

•ETAD

WFSGI

...and others































Other classification schemes?

 Stockholm Convention on Persistent Organic **Pollutants**

Retailer RSLs

 Non Government **Organisations**



































Upcoming Classification Schemes

 REACH (European **Chemicals Agency** Resistration, Evaluation & **Authorisation Scheme)**

 US Environmental **Protection Agency (decision** on Fluorocarbons)

 California Proposition 65 to include Phthalates































Some examples...

- Biocides
 - Dyes
- Fluorocarbons
- Heavy Metals
 - Phenols
 - Phthalates
 - Solvents

and others....

















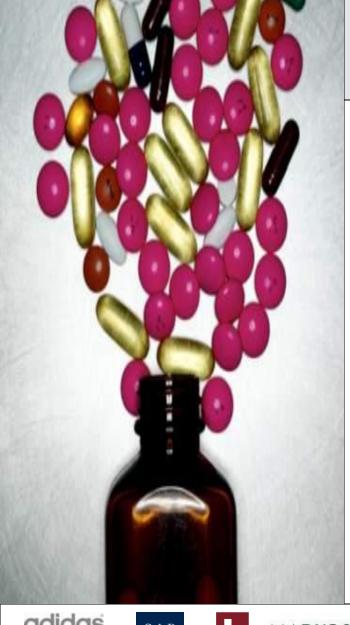












Where are they found?

Biocides

 Antibacterial treatments such as Triclosan

 Associated with antibiotic resistance



























Where are they found?

Restricted dyes

 Certain Azo Dyes which cleave to form restricted amines in natural fibres & leather.

Carcinogenic

- Certain Disperse Dyes in synthetic fibres.
 - Skin sensitising

























Where are they found?

Fluorocarbons

•8 chain fluorocarbons e.g. PFOS and their building blocks e.g. PFOA

 Used in water, stain & oil repellent finishes for textiles & leather.

•Environmentally persistent & suspected health risks



























Where are they found?

Heavy Metals

- Such as Cadmium, Chromium VI, Lead, Mercury
- Heat stabilisers used in pigments, dyes & plastics.
 - Toxic, bio-accumulative
 & environmentally
 persistent























Where are they found?

Phenois

- Such as Pentachlorophenol (PCP) & Tetracholophenol (TeCP)
- Pesticides, fungicides & preservatives for crops, textiles & down.
- Toxic to the environment



























Where are they found?

Phthalates

- Softeners used in plastics, prints and trims
 - Bioaccumulative & endocrine modulating
- Restricted for children under 3 years old























Where are they found?

Solvents

- Found in cleaning agents, adhesives, dye carriers & print binders.
- Toxic & Ozone depleting

























