Innventia provides complete chemical analysis for materials intended for food contact. We analyse all types of materials, e.g. paper, board and plastics. We perform both standard analysis for demonstrating compliance with regulations, as well as specific analysis for help during product development and problem solving.

What can we do for you?

For **Paper and board** we offer testing in compliance with:
- Recommendations BfR XXXVI, Germany
- FDA, CFR (Code of Federal Regulations) 21-Food and drugs, USA
- Directive 94/62/EC on Packaging and packaging waste
- CoE Resolution RESAP 1 on Paper and board materials and articles intended to come into contact with foodstuffs
- European directives (e.g. EN 71 Safety of Toys)

For **plastics and other materials** we offer testing in compliance with e.g. EU 10/2011 Regulation on articles intended for contact with food (“PIM”) and EU Directive 97/48/EC “Basic rules for migration testing”

**Examples of testing areas:**
- Migration tests
- Specific migration tests
- Set-off and migration of printing inks
- Test of barrier properties
- Screening migration “10 ppb level”
- Chlorinated compounds e.g. dioxins and PCB, PCP, TotCl
- Migration/extraction of metals
- Volatile compounds and odour (e.g. hexanal, terpenes)

A list of analytical services related to food contact materials is appended. Please contact us for a discussion about how we may help you!

**Contact**
For more information, please contact
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We look forward to your inquiries!
## CHEMICAL ANALYSES FOR FOOD CONTACT MATERIALS

### Overall migration for plastics

<table>
<thead>
<tr>
<th>Migration to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aqueous simulants</td>
</tr>
<tr>
<td>95% ethanol and isooctane</td>
</tr>
<tr>
<td>MPPO (Tenax®)</td>
</tr>
<tr>
<td>Olive oil</td>
</tr>
</tbody>
</table>

### Examples of specific migrations

- Primary Aromatic Amines (PAAs)
- Bisphenol A
- Terephthalic acid
- Irganox
- BADGE
- Phthalates and adipates
- BHT
- Vinylacetate

### Examples of analysis for paper and board

- Formaldehyde and glyoxal in water extract
- Metals in water extract
- Transfer of optical whitening agents and colour
- Pentachlorophenol (PCP)
- Polychlorinated biphenyls (PCB)
- Dichloropropanediol (MCPD) and dichloropropanol (DCP)
- Phthalates
- Primary aromatic amines (PAA)
- (MOSH/ MOAH)

### Headspace analysis of volatile compounds

Used e.g. for detection of set-off and for odour problems.

### Screening “10 ppb”

Screening for migration of substances from food contact materials at 10 ppb level.

### Analysis of printing ink components

- Screening for migration of printing ink components
- Set-off migration
- Migration of mineral oils (MOSH/MOAH)

### Barrier properties

- Test of barrier properties against migration of organic compounds (single-sided headspace cell)
- Oxygen and water vapour transmission (ASTM-rated Mocon equipment)

### Inventia is accredited according to ISO 17025

**Product safety**

- Overall migration to aqueous simulants and organic test media (EN 1186-3, -5, 9 and 15)
- Water extraction (EN 645, EN 647)
- Metals in water extracts (Cd, Cr, Hg, Pb, As, Ba, Sb, Se)
- Metals in HCl extracts (EN 71-3)
- Formaldehyde in water extracts (EN 1541)
- Fastness of optical brighteners (EN 648)
- Colour fastness (EN 646)

### Other accredited areas

- Environmental analysis (Chlorate in effluents)
- Physical testing of pulp and paper
- Optical calibration service
- Vibrations testing of packages

**INNVENTIA AB** is a world leader in research and development relating to pulp, paper, graphic media, packaging and biorefining. Our unique ability to translate research into innovative products and processes generates enhanced value for our industry partners. We call our approach *boosting business with science*. Inventia is based in Stockholm, Bäckhammar and in Norway and the U.K. through our subsidiaries PFI and Edge respectively.