A PROVEN BARRIER TO MINERAL OILS

NatureFlex™ the next generation of innovative barrier packaging

NatureFlex™ NEXT GENERATION PACKAGING
What are mineral oils?

- MOSH (Mineral Oil Saturated Hydrocarbons) - short chain MOSH can be easily absorbed by the human body and stored in several organs. May lead to damage in liver, heart valves and lymph nodes.
- MOAH (Mineral Oil Aromatic Hydrocarbons) - may include components that are carcinogenic.

Migration issue – two main sources

- Mineral oils have been found to be present in recycled cardboard packaging.
- It is believed they come from newspapers and their inks.

What tests have been carried out to prove the effectiveness of films?

- The effectiveness of NatureFlex™ has been confirmed in tests performed in the laboratories of the Official Food Control Authority of the Canton of Zürich in Switzerland, under the supervision of Dr. Koni Grob.

Results

<table>
<thead>
<tr>
<th>Grade Reference</th>
<th>Mineral oil breakthrough period @ 25°C*</th>
</tr>
</thead>
<tbody>
<tr>
<td>NatureFlex™</td>
<td>5.9 years***</td>
</tr>
<tr>
<td>Cellophane™</td>
<td>5.9 years***</td>
</tr>
<tr>
<td>Standard PE</td>
<td>&lt; 1 day**</td>
</tr>
<tr>
<td>Uncoated OPP</td>
<td>&lt; 2 weeks**</td>
</tr>
</tbody>
</table>

* Acceleration method used: 36 days at 60°C corresponds to 3 years at 25°C.


*** Reference – Grob K, Test on barrier properties of 3 films received on March 18, 2011, available on request.

NatureFlex™ the solution

Shown to:

- Significantly reduce the migration of mineral oil residues from recycled cardboard packaging into foodstuffs when compared to conventional plastic substrates e.g PE, coextruded OPP.**
- Provide an equivalent mineral oil barrier to 5.9 years at room temperature.***

Additional benefits:

- Renewable & compostable
- Excellent optical properties
- Wide heat seal range
- Superior gas barrier

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