Contents

• Who are Exova?
• What is Valid-IT?
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• The approach used on assessment.
• Why is Valid-IT still relevant?
• The Future
Exova operates in the following industries:

- Health Sciences
- Environmental
- Pharmaceuticals
- Energy/Fire
- General Engineering
- Aerospace & Automotive
- Oil & Gas
History of Exova Health Sciences

• Formerly Lawlabs set up in 1987
• ‘One Stop Shop’ – Legal & Analytical support to the industry
• Bought by Bodycote in 2004 (moving into food)
• Bodycote Materials Testing sold to CD&R in 2008
• Re-named Exova in June 2009.
## Health Sciences

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<th>Auditing and Compliance</th>
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<td>Labelling and Product Specifications</td>
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<td>Food Law Consultancy</td>
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<td>Food Information Regulations</td>
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</table>
Why did Valid-IT start?

GM crops to hit wildlife, says advisory body
14-Jan-2004

GM blunder contaminates Britain with mutant crops
by SEAN POULTER, Daily Mail

Large areas of the British countryside have been contaminated by illegal 'Frankenstein' crops, it emerged yesterday.
Sudan I

- Illegal dye
- Not intended for food use
- Added to enhance value

- Costs to UK industry – estimated to be between £100-200m
- 1395 items of media coverage in 2-3 weeks

Exova
What is Valid-IT?

- Operated since 2004
- Operates on behalf of

Tesco

Live Well For Less

Sainsbury’s

Exova
What is Valid-IT?

• Programme for the assessment of suppliers for certain controlled ingredients

• Risk assessed approach

• Annual renewal process
What is Valid-IT?

• Internet enabled database managed by experienced Exova Team

• Searchable list of suppliers and ingredients

• Password controlled
Controlled Ingredients

• Non GM – Soya and Maize and their derivatives including Non EU Rapeseed Oil

• To date there are

• 179 Suppliers

• 525 Ingredients
<table>
<thead>
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<th>Controlled Ingredients</th>
<th>Controlled Ingredients</th>
<th>Controlled Ingredients</th>
<th>Not Controlled Alternatives</th>
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<tr>
<td>Maize</td>
<td>Soya</td>
<td>Compounds</td>
<td>Ascorbic Acid (Sodium Ascorbate)</td>
</tr>
<tr>
<td>Caramel (derived from glucose syrup)</td>
<td>Hydrolysed Vegetable Protein</td>
<td>Aspartame</td>
<td>Citric Acid (Sodium Citrate)</td>
</tr>
<tr>
<td>Corn Oil (Maize oil)</td>
<td>Soya Isoflavones</td>
<td>Ascorbic Acid (Sodium Ascorbate)</td>
<td>Coconut Oil</td>
</tr>
<tr>
<td>Corn Syrup</td>
<td>Soya Flour</td>
<td>Hydrolysed vegetable protein</td>
<td>Dextrose (not from Maize)</td>
</tr>
<tr>
<td>Corn Syrup Solids</td>
<td>Soya Milk</td>
<td>Maltodextrins</td>
<td>Maltodextrins (from wheat etc)</td>
</tr>
<tr>
<td>Dextrose, Fructose (from Maize)</td>
<td>Soya Curd, Tofu, Bean Curds</td>
<td>Monosodium Glutamate</td>
<td>Palm Kernel</td>
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<tr>
<td>Glucose syrup (Corn syrup)</td>
<td>Soya Grits</td>
<td>Sauces from Soya</td>
<td>Palm Oil</td>
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<tr>
<td>Glycerides (from Maize)</td>
<td>Glycerides (from Soya)</td>
<td>Xanthan Gum</td>
<td>Potato starch</td>
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<tr>
<td>Maize Flour</td>
<td>Soya Protein Isolate/Concentrates</td>
<td></td>
<td>Sunflower Oil</td>
</tr>
<tr>
<td>Maize gluten</td>
<td>Soya Lecithin</td>
<td></td>
<td>Wheat starch</td>
</tr>
<tr>
<td>Maize Grits</td>
<td>Soya Isoflavins</td>
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<td>Wheat Gluten</td>
</tr>
<tr>
<td>Maize Starch</td>
<td>Soya Oil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maltodextrins</td>
<td>Textured Vegetable Protein (including soya protein)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masa Flour</td>
<td>Soya beans</td>
<td></td>
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<tr>
<td>Modified Maize Starch</td>
<td>Soya Meal</td>
<td></td>
<td></td>
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<tr>
<td>Polenta</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Polyols</td>
<td></td>
<td>ALSO CONTROLLED</td>
<td></td>
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<tr>
<td>Sweetcorn</td>
<td></td>
<td>Rapeseed Oil (Non EU only)</td>
<td></td>
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</tbody>
</table>
Risk Assessment

• Does the territory where the ingredient is grown lawfully permit the growing or processing of GM of that crop?
• EU or Non EU – in particular US, Canada, Brazil, China?
• IP certification?
• Other accreditations
• Test results. Traceability example.
• GM and Non GM on same site?
Risk Assessment – Process

- Seeds
- Harvesting
- Storage – farm, processing, rest of supply chain – segregation?
- Transportation at all stages – segregation, cleaning etc
- Risk of cross contamination at all stages
- Testing conducted at all stages
New at risk ingredients

- Rice from China
- Rice products from China or Hong Kong
- Basmati Rice
Controlled Ingredients - Spices
Capsicums (Paprika, Chilli, Cayenne pepper)

Turmeric

Compound ingredients which include these spices such as blends, flavourings, bouillons, sauces and pastes.

Exova
Uncontrolled Ingredients - Spices

• The following ingredients are excluded:

• Extracts of these spices, including Colours & Oleoresins.
• Dried/Dried and Chopped Spices where the product does not contain element.
• Fresh Spices
Controlled Ingredients - Spices

• To date there are

• 110 Suppliers

• 368 Approved Ingredients
Controlled Ingredients - Spices

Main areas concentrated on:-

- Certification of site
- Traceability
- Testing
- Millers/Grinders
Controlled Ingredients – Spices

Legislative Requirements

• Commission Decision 2005/402/EC of 23 May 2005 which required all consignments to be accompanied by analytical certificates has been revoked.

• Controls on the import of chilli, chilli products, curcuma and palm oil fall under Regulation (EC) 669/2009 (as amended).
Controlled Ingredients – Spices

Legislative Requirements

• This Regulation stipulates that 20% of all imports must be tested at designated point of entry for Sudan Dyes.
Relevance today

relevance n.

1. Pertinence to the matter at hand. Relevance is a term used to describe how pertinent, connected, or applicable some information is to a given manner.

Exova
GM in the Media

On sale in Tesco, GM cereal that makes children hyperactive: U.S. import of Lucky Charms contain artificial colours that UK watchdog urges manufacturers to avoid

American 'Frankenstein food' company pulls plug on plans to put GM crops on British dinner tables because there is no appetite for the produce

GM super-pigs and the new threat to our food: How genetically modified produce is becoming a disturbing reality in our lives

By DR HELEN WALLACE, DIRECTOR OF GENEWATCH UK
PUBLISHED: 05:16, 17 April 2013 | UPDATED: 09:32, 17 April 2013
Study linking GM maize to cancer must be taken seriously by regulators
Trial suggesting a GM maize strain causes cancer has attracted a torrent of abuse, but it cannot be swept under the carpet

How China and US 'secretly tested genetically modified golden rice on children'
By DAILY MAIL REPORTER

China's health authorities are investigating allegations that genetically modified rice has been tested on Chinese children as part of a research project.

A recent scientific publication suggested that researchers, backed by the US Department of Agriculture, fed experimental genetically engineered golden rice to 24 children in China aged between six and eight years old.

The environmental group Greenpeace is demanding a stop to field trials of the genetically enriched rice, which has been
Relevance
Rapid Alert System for Food and Feed (RASFF)
01/01/2012 – 04/10/2013

Unauthorised GMOs entering EU
Rice – 66
(Mainly rice from China but also Basmati Rice from Pakistan)
Papaya - 36
Popcorn – (Maize) 4

Exova
Relevance

Rapid Alert System for Food and Feed (RASFF)
01/01/2012 – 04/10/2013

Products containing
Unauthorised Sudan Dyes - 10
The Future of Valid-IT

• GM + Dyes

• Rice and Rice products from China

• Basmati Rice

• Papaya?

Exova
The Future of Valid-IT

- New and improved website
- Smartphone App?
- Fully interactive website
- New retailers
- Certificates
- Testing
Valid IT in Summary

- Experienced team with knowledge of the existing supply base
- Still relevant
- On going development and bespoke options to extend the scope of the scheme
- Trusted, Impartial, Independent
• Thank you – any questions??

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