

The screenshot shows the IUCLID 6 software interface for a study record. The main title is 'Imidacloprid SUBSTANCE'. The left sidebar contains a detailed navigation tree with sections such as '1 Identity of the active substance and applicant', '2 Physical and chemical properties of the active substance', '3 Further information on the active substance', '4 Analytical methods', '5 Toxicological and metabolism studies on the active substance', '6 Residues in plant treated products, food and feed', '6.1 Storage stability of residues', '6.2 Metabolism, distribution and excretion of residues', '6.3 Magnitude of residues in plant', '6.4 Determination of residues of Imidacloprid in plant material (The imidacloprid residues show high chronic toxicity to many organisms)', '6.5 Chlorononanoic acid REFERENCE-SUBSTANCES', '6.6 Reference-SUBSTANCES', '6.7 Imidacloprid REFERENCE-SUBSTANCES', '6.8 Name and Unit 246 CS', '6.9 Feeding studies', '6.10 Effects of processing', '6.11 Residues in rotational crops', '6.12 Proposed residue definitions and maximum residue limits', '6.13 (CF 2:1) Proposed safety (imma)', '6.14 Generation of the potential and actual exposure through diet and other sources', '6.15 Other studies', '6.16 Migration of residues into and their behaviour on food or feeding stuffs', '7 Persistence and behaviour in the environment', '8 Ecotoxicological studies on the active substance', '9 Literature data and change log', '10 Classification and labelling of the active substance', and '11 Summary and evaluation'. The main content area displays a table for 'RA-2058/99 Trial R1999 0380/4' with columns for 'Fortification level', 'Recovery (%)', and 'Action'. The table is repeated three times for different 'Analyzed sample portion ID' (fruit, peel, and fruit). Below this is a 'Method ID' section for '03664 (NR027/99)'.

A very simple* example for an endpoint study record according to OHT 85-5

- 1x Trial
- 1x Plot
- 1x Mixture (=Product)
- 2x Analyt. Methods with 2–4 fortification levels
- 3x Substances
- Residue values

The IUCLID user interface is no longer human readable because the aggregated raw data is presented in a large number of nested repeating blocks!

*1 Trial 1 plot → in reality often x100

Records are not searchable by substance

Application of a mixture of two active ingredients:

Imidacloprid

Fenamiphos

Analysis of the active ingredients + 1 metabolite:

6-chloronicotinic acid

Endpoint_Study_Record was created for the
“Imidacloprid” substance data → OK

This Endpoint_Study_Record could not be found
for the “Fenamiphos” substance data set
→ Causes problems in assessment

Current difficulties (examples)

- Humans are not able to create complex test datasets for programming the import tool
- Humans are not able to understand the content and to check for errors
- Humans would need a recipient (database) or a readable internal IUCLID report, which is both not yet available

- IUCLID isn't searchable by substance (why? due to data model?)
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