

Oil-Expert.net *the virtual fat lab*

25 Years of Oil-Expert

Preface

In July 2023, Oil-Expert.net turned 25 years old. The first version of Oil-Expert was released in July 1998. Development was initially relatively slow and sales were sluggish. The time simply wasn't right back then. It wasn't until 2010 that there was a leap upwards, and from then on the development was continuous up to the current stage of development.

Today, Oil-Expert.net stands for flexibility, customer orientation, experience and trust. Oil-Expert.net is continuously being developed and is now more modern and established than ever. Internationally, Oil-Expert.net has a unique selling point, as far as we know there is no other software worldwide for the fat chemist with a range of functions and services that is only approximately as large. This is also confirmed to us by potential customers who are looking for a comparable tool. The search always leads to Oil-Expert.net.

How could such a comprehensive tool be realized at all? Well, 25 years is a long time, especially for software. During this time, Oil-Expert.net has been continuously developed, ie. existing functions have been improved, new functions have been added. We would also like to thank our users, who have contributed to this with suggestions for improvement and expansion.

The continuity is also shown by the fact that our users can continue to use their data completely and without great effort with newer versions of the software right from the start. This also includes changing the operating systems - Windows 98 / 2000 / XP / Vista / 7 / 8 / 10 / 11 - and the corresponding versions of the MS Access database.

The Oil-Expert.net roadmap is clearly future-oriented. What is planned for 2023/2024?

- Administration and processing of article data with release management
 - Specifications: Phys. und chem. parameters, nutrition data, allergen status, GMO, kosher, declarations, ingredients, packaging
 - Automatic generation of declarations from article specifications
- Improvement and extensions of their recipe management
 - Assemblies, Gozintograph
- Improvement and extensions of the import and export functions with JSON
 - Optimum integration into existing IT-solutions, eg ERP-Systems

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Article and recipe management is a larger project. Completion is scheduled for mid-2024 for article management and the end of 2024 for recipe management. But this year we have also introduced some small extensions and improvements, e.g.:

- Min/max quantities for simulation
- Import of raw material prices - State
- Extension of the project management, eg Keywords
- Definition and processing of international analytical methods

We have found that many interested customers do not immediately understand what Oil-Expert.net actually is and what its benefits are. Before we continue, here's a quick answer to this question.

What is Oil-Expert.net?

Oil-Expert.net is a software for the product development of fat blends for various areas of applications, e.g. margarine, shortenings, cream fats, frying fats, confectionery fats, etc. In addition to managing the extensive data for product development, there are two extremely effective tools - Simulation and optimization. These are two technical terms, but they are relatively easy to explain:

- **Simulation:** A simulation imitates the functioning of real processes or systems using models. The model represents the key behaviors and characteristics of the selected process or system.
- **Optimization:** The field of optimization in applied mathematics is concerned with finding optimal parameters of a - usually complex - system (here fat blends). Optimal means that an objective function is minimized or maximized (here usually the price or the analytical parameters).

Simulation and optimization are common tools today - example crash simulation in the automotive industry. Not only do you save costs, but you also get more comprehensive and faster results. Thanks to modern IT technology, simulations and extensive optimizations are now also possible on well-equipped computers.

Oil-Expert.net is, so to speak, a virtual fat lab. The functions are so extensive that they cannot all be listed here. Please read newsletter no. 13. It also shows the benefits that Oil-Expert.net brings to the various departments in a company.

You can find out how you can now use the advantages of Oil-Expert.net in Newsletter 13 on our website and below.

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How can you use Oil-Expert.net right now? Very easily.

- **Future-proof in four steps with Oil-Expert.net:**
- Get a non-binding offer. By the way, next year Oil-Expert.net will be celebrating its 25th anniversary. From January 1st, 2023 we are offering you Oil-Expert.net at a particularly low all-inclusive price, including setup and entering your data. So you can start working with Oil-Expert.net immediately.
- Download, install and test the demo version until the budget is approved.
- Purchase Oil-Expert.net licences.
- Switch from the demo version to the full version and continue working with the data already generated.

Demo Version

We would be happy to provide you with a full-featured demo version. The demo version can be used for three months. If necessary, the term can be extended.

The demo version not only offers all functions of the full version, the data generated with the demo version can still be used with the full version. The database is compatible with both the demo and the full version.

And it's that quick and easy (time required approx. 15 minutes):

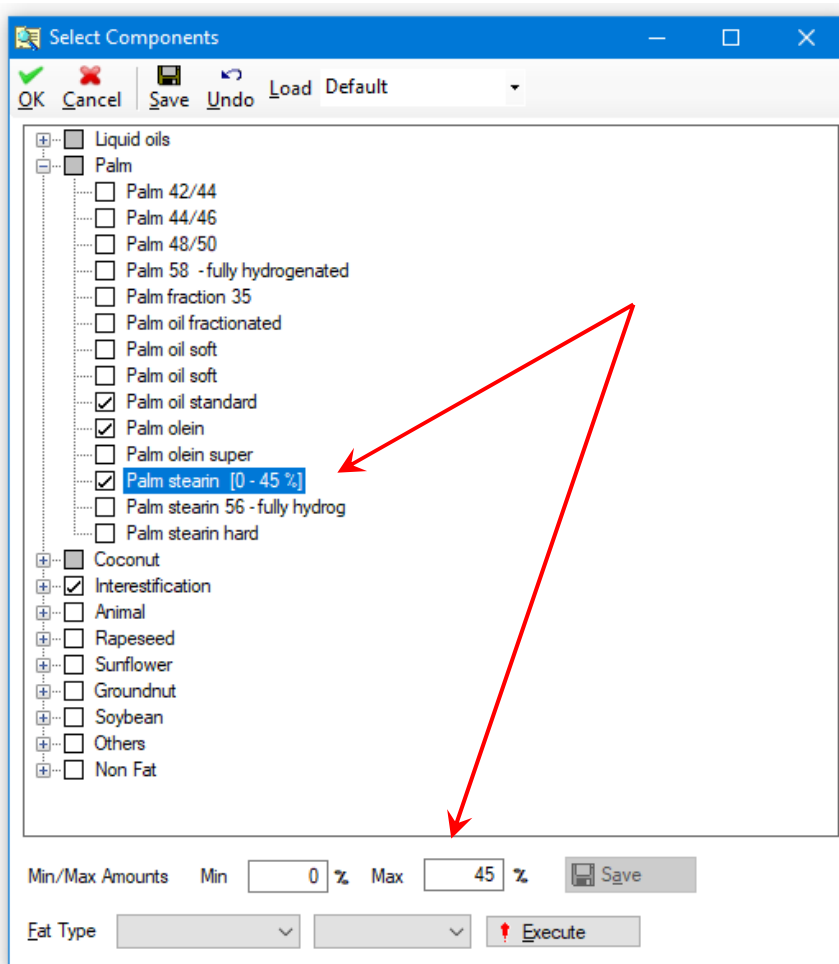
- Request download link info@oil-expert.net
- Download the software package from our website
- Install Oil-Expert software
- Start Oil-Expert.net and enter the registration code
- Finished!

The software is supplied with around 40 standard components and some example projects. Using the example projects and the PDF manual, you can quickly and easily learn how to work with Oil-Expert.net. If you have any questions, please do not hesitate to contact us - by email, phone, Skype or any other medium of your choice.

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Min/Max Quantities for Simulation

From the current version onwards, the min and max quantities that should be used for a recipe can be specified before the simulation. The default values are 0 – 100%. If the min/max values deviate from this, they will be displayed in the dialog for selecting the components, e.g. to the right of the palm stearin component (see illustration below). The min/max values are set at the bottom of the dialog – see example palm stearin [0 – 45%]. This means that the palm stearin component is only included in the recipe up to a proportion of 45%. Calculated recipes with over 45% are discarded.

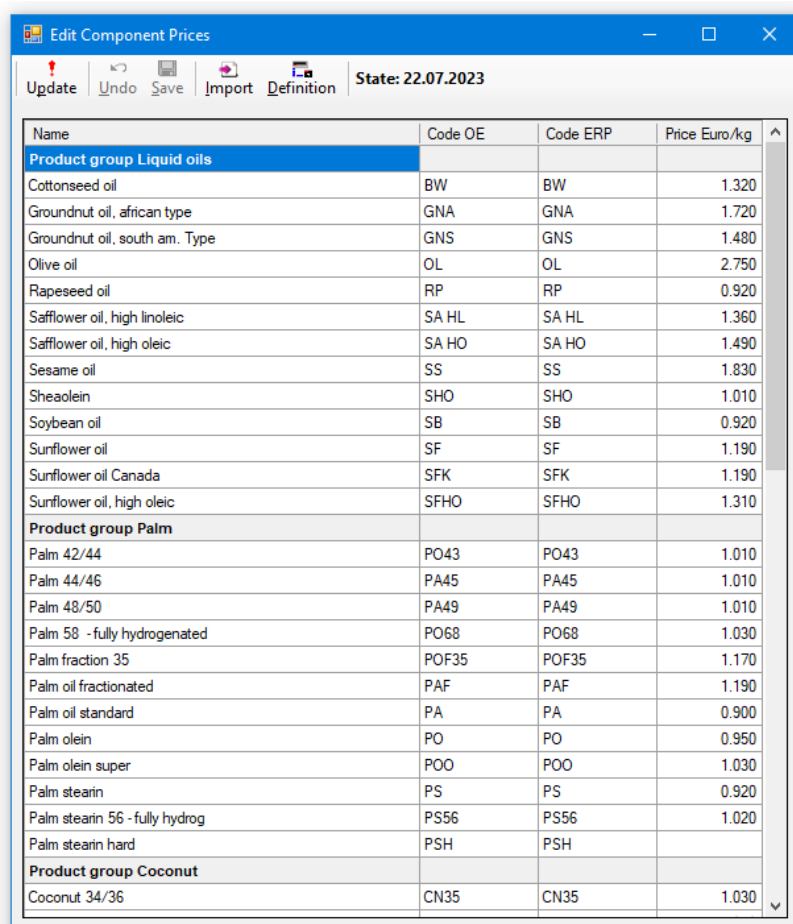


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Import of raw material prices

Previously it was not possible to see the date of the last update in the dialog for editing raw material prices. Starting with the latest version, the status of the last update is displayed at the top right of the menu bar (see illustration below).

This date is updated both when the raw material prices are re-imported and when they are changed manually. If the raw material prices are updated manually, you can see whether a new import of the raw material prices is necessary.



Name	Code OE	Code ERP	Price Euro/kg
Product group Liquid oils			
Cottonseed oil	BW	BW	1.320
Groundnut oil, african type	GNA	GNA	1.720
Groundnut oil, south am. Type	GNS	GNS	1.480
Olive oil	OL	OL	2.750
Rapeseed oil	RP	RP	0.920
Safflower oil, high linoleic	SA HL	SA HL	1.360
Safflower oil, high oleic	SA HO	SA HO	1.490
Sesame oil	SS	SS	1.830
Sheaolein	SHO	SHO	1.010
Soybean oil	SB	SB	0.920
Sunflower oil	SF	SF	1.190
Sunflower oil Canada	SFK	SFK	1.190
Sunflower oil, high oleic	SFHO	SFHO	1.310
Product group Palm			
Palm 42/44	PO43	PO43	1.010
Palm 44/46	PA45	PA45	1.010
Palm 48/50	PA49	PA49	1.010
Palm 58 - fully hydrogenated	PO68	PO68	1.030
Palm fraction 35	POF35	POF35	1.170
Palm oil fractionated	PAF	PAF	1.190
Palm oil standard	PA	PA	0.900
Palm olein	PO	PO	0.950
Palm olein super	POO	POO	1.030
Palm stearin	PS	PS	0.920
Palm stearin 56 - fully hydrog	PS56	PS56	1.020
Palm stearin hard	PSH	PSH	
Product group Coconut			
Coconut 34/36	CN35	CN35	1.030

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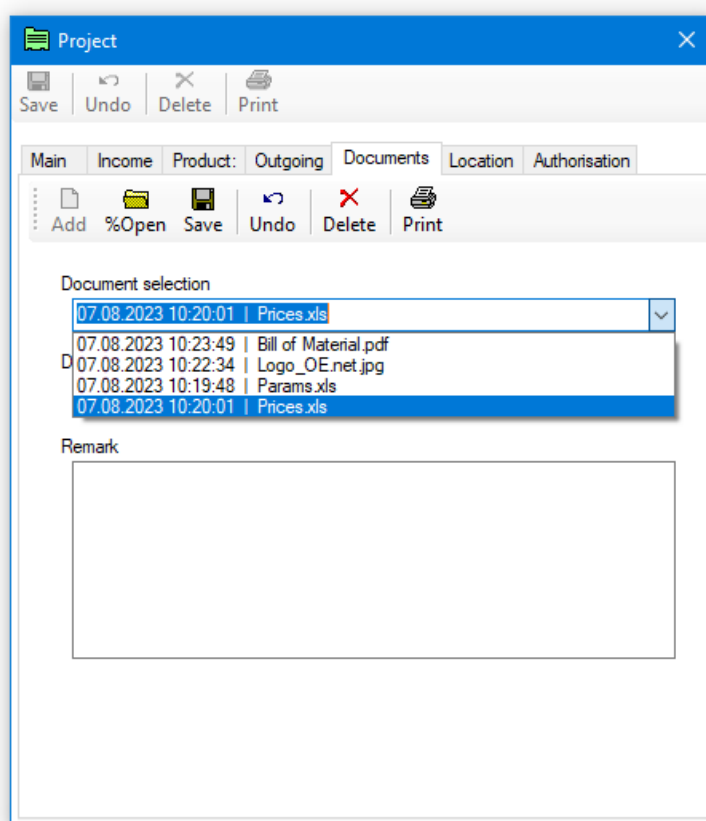
Project Management

Project management was completely revised. Existing errors and inconsistencies have been eliminated and new functions have been added.

Document Management

Document management is used to assign documents in any format to each project. The only requirement is software to open and edit the document, e.g. Word, Excel, PDF reader, etc. The standard document formats are: Word, Excel, PowerPoint, PDF, text, JPEGs, etc. The editing takes place in the project form under the Documents tab (see illustration below).

A time stamp was added to the document management. Each added document automatically receives a time stamp that can no longer be changed by the user (see illustration below). The sorting is done by timestamp in descending order, which means that the document with the most recent timestamp is always first.



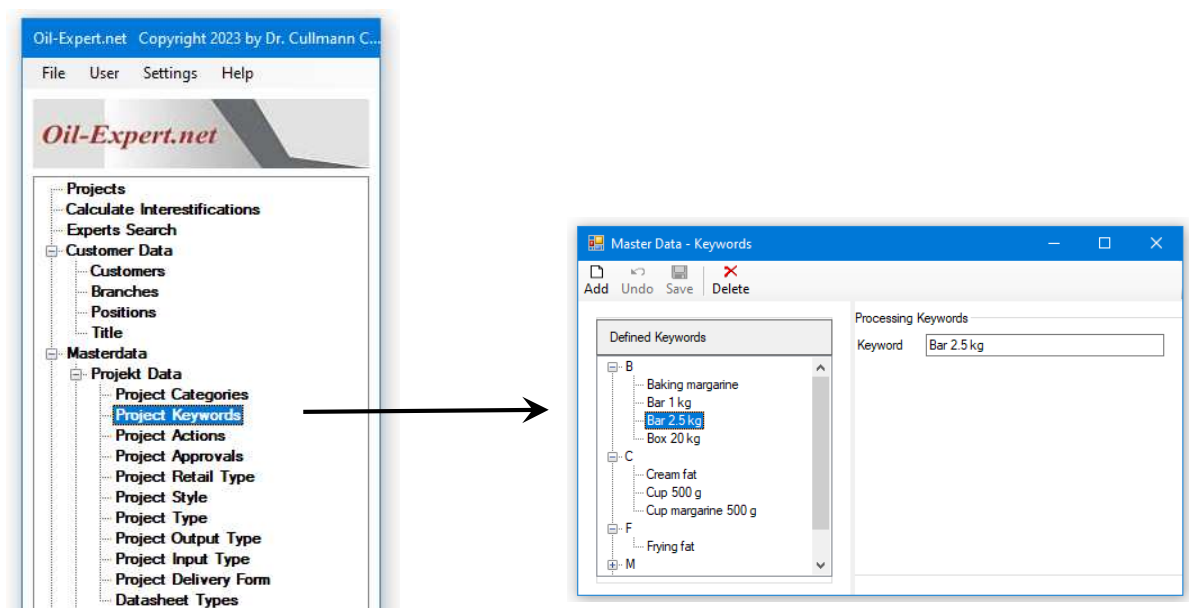
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Keyword Search in Projects

Although there is already a search function with which you can search for a specific project using all existing parameters, searching for self-defined keywords still increases the flexibility when searching. To do this, the keywords must first be defined. Specific keywords can then be assigned to individual projects. Multiple keywords can be linked to search.

Definition of Keywords

The keywords are part of the project master data. To edit the keywords, the function <Master data / Project data / Project keywords> is selected by double-clicking in the menu tree. The Master Data Keywords dialog opens (see illustration below).



The keywords are arranged alphabetically. The defined keywords are displayed as a tree structure with the respective first letter as the root. This makes it easier to search for keywords that have already been defined. If a new keyword already exists, information will be sent and the new keyword cannot be saved.

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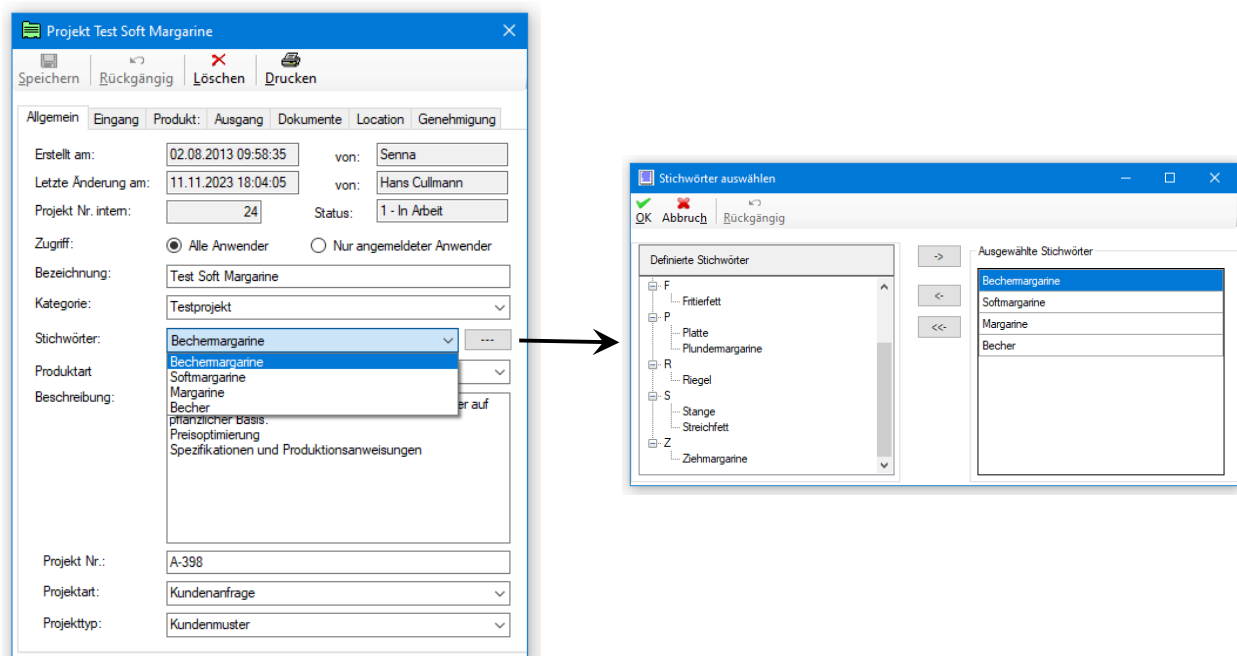
Assignment of Keywords to Projects

You can access the dialog for assigning keywords using the button next to the keyword list in the project dialog (see below).

In this dialog the keywords are selected or removed from the selection. The table on the left contains all defined keywords sorted alphabetically in a tree structure. The table on the right contains the selected keywords.

A keyword is selected by clicking with the mouse. You can also select multiple keywords by pressing the Ctrl key at the same time. After selecting the parameters, click on the arrow keys between the two tables to move them to the other side. By clicking on the double arrows, all keywords will be moved from right to left. A specific keyword can also be moved from left to right or vice versa by double-clicking the mouse.

After completing the selection and clicking *OK*, the keyword selection is adopted into the project. Subsequent changes are possible at any time.

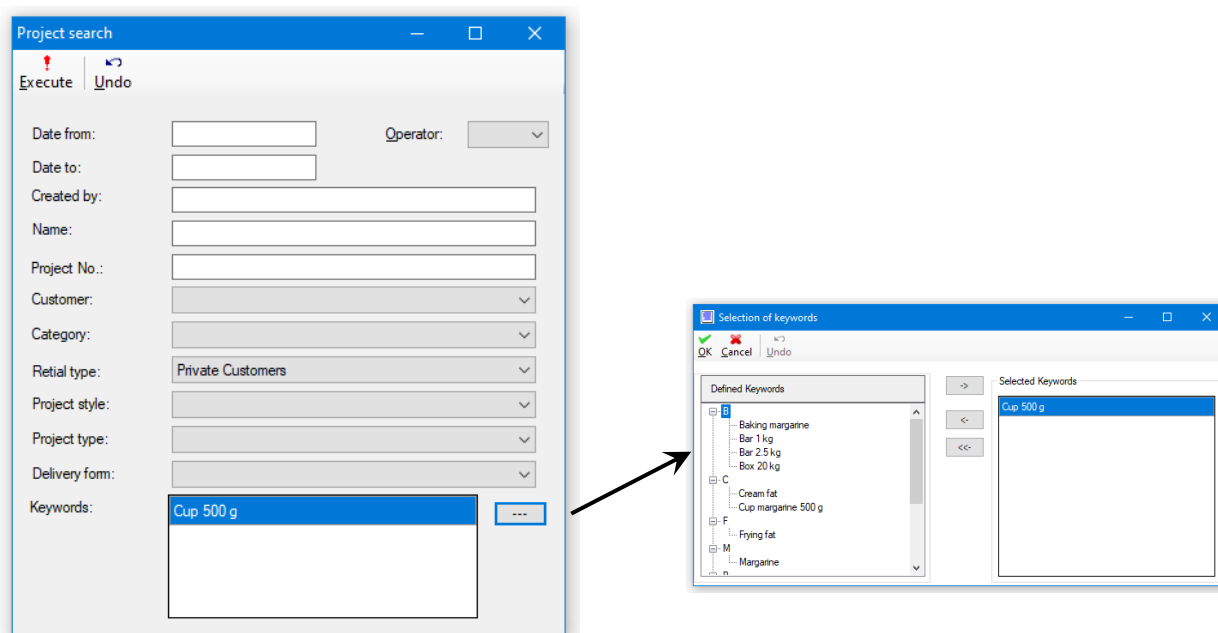


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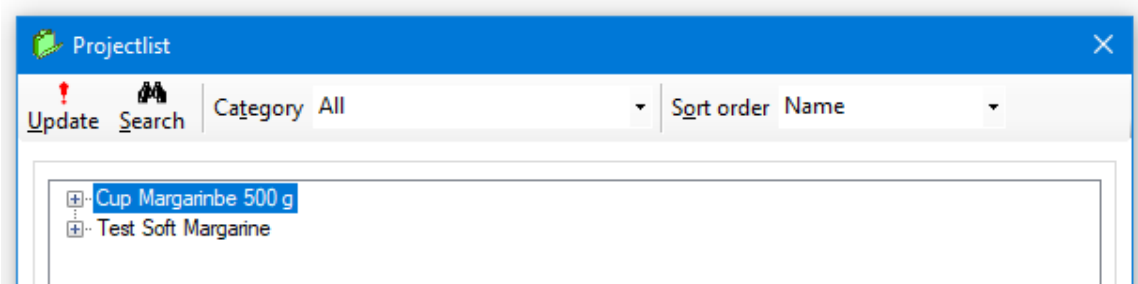
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Search by Keyword

After the keywords have been defined and assigned to the respective projects, the search can begin. The search dialog is opened by clicking on the 'telescope' symbol in the menu bar of the project dialog. The search parameters can be defined in this dialog (see figure below). In the example, product type = “household” and keyword = “cup” are selected. Multiple keywords can also be selected. The keywords are selected using the button next to the keyword list in the search dialog. All search parameters entered are linked with “AND” in the query. The selection is made in the same way as the assignment to the projects (see previous page). By clicking on Reset, all entered parameters will be deleted and a new entry can be made.



When you have finished entering the search parameters, the search is started by clicking *Execute*. If projects are found with the search parameters, the found projects are displayed in the project dialog (see figure below). Otherwise, you will be informed that no projects were found.

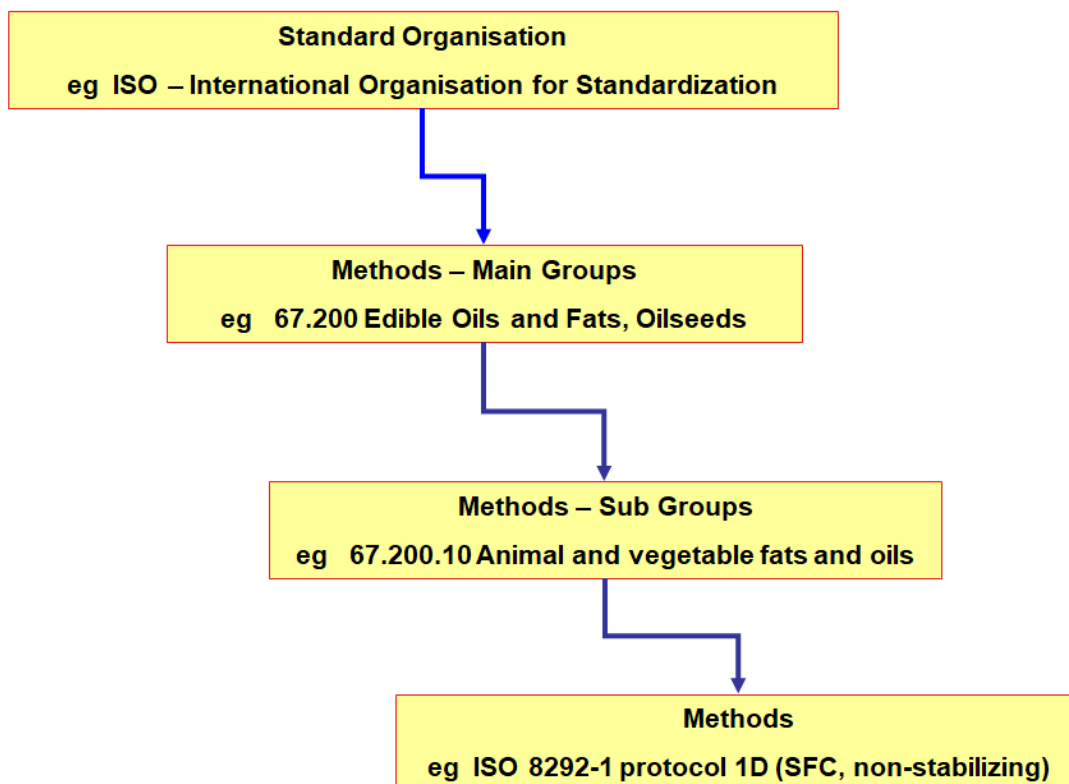


Definition and Processing of Analytical Methods

For the analysis of fats and oils, there are many methods for determining chemical key figures, physical key figures, quality key figures, etc. To expand Oil-Expert to include the management and processing of articles, a method is required for each analytical parameter for documentation reasons.

The best known in English-speaking countries are probably the ISO standard methods, which have been around for over 75 years. There are also other organizations that develop and distribute standards for analytical methods. Some examples are DGF (German Society for Fat Science), AOCS (American Oil Chemist Society) and IUPAC (International Union of Pure and Applied Chemistry). Some of the analysis methods are the same - e.g. determining the Solis Fat Content - but sometimes there are more or less large deviations.

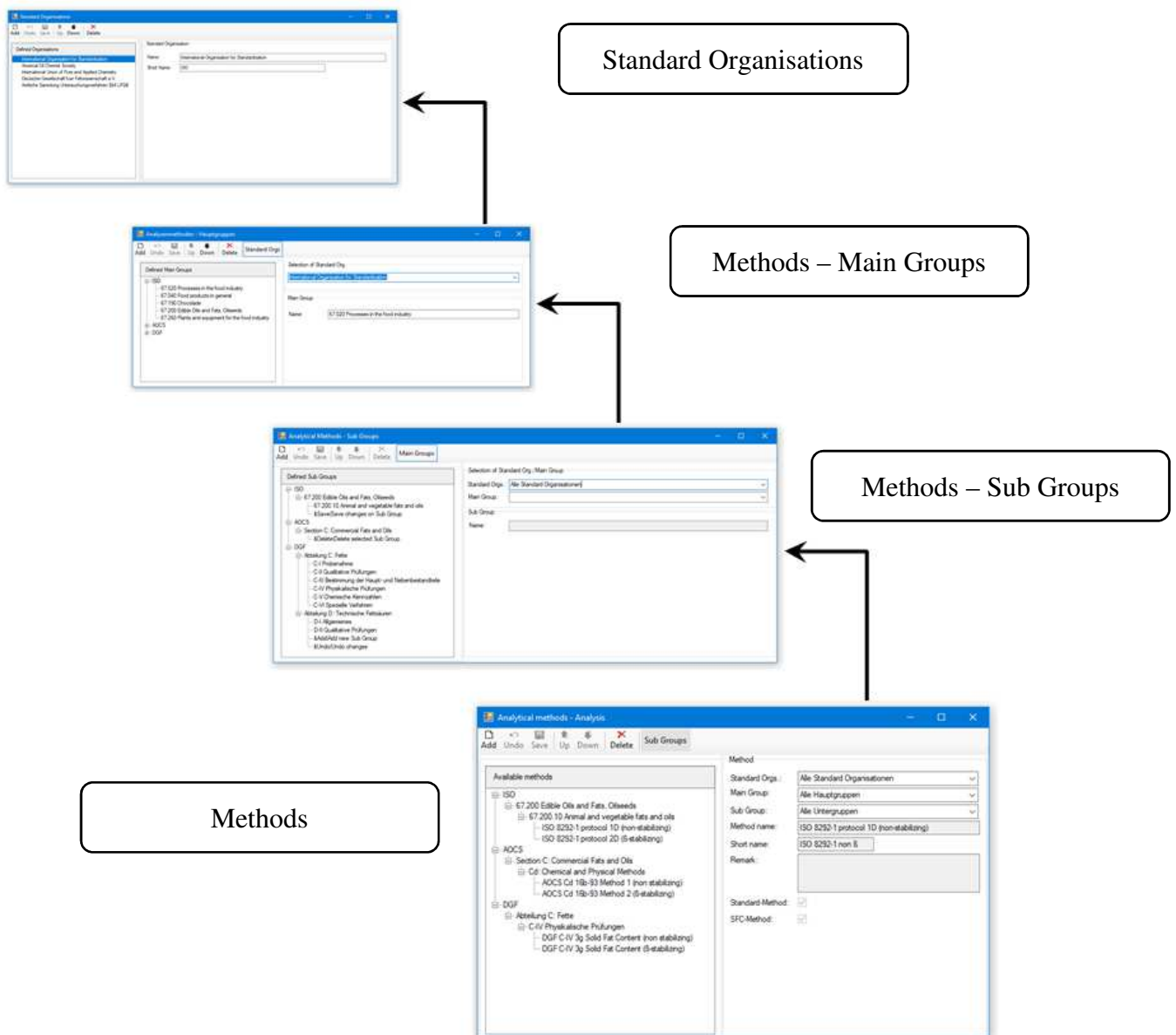
Since Oil-Expert is used internationally, it is necessary to combine all international standards for determining the key figures of fats and oils in a common scheme. The following figure shows the preliminary result, which is certainly in need of improvement.



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This hierarchical structure can also be found in the dialogues with which the individual levels are processed.



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Imprint

We would be glad to provide you with further information. Please feel free to contact one of our distributors.

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