Tipps&Tricks with G[raf]Compounder

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No. XIII
How to Start with a Table in GrafCompounder

Introduction:

In many cases, users begin their work in GrafCompounder by importing existing formulation tables from Excel or similar tools. Although the data structure appears correct, the pasted table often cannot be used immediately for calculations.
This behavior is not a software limitation, but a consequence of missing structural definitions. GrafCompounder requires specific keywords to interpret the table content correctly.

The following procedure describes how to convert a simple pasted table into a fully functional working format.

Starting Situation

A typical Excel table contains a list of ingredients, corresponding values, and additional rows such as total phr and material properties (Fig.: 1) From a user perspective, this structure appears complete and ready for use. However, when transferred into GrafCompounder, the system initially treats it as undefined data.

Initial Import

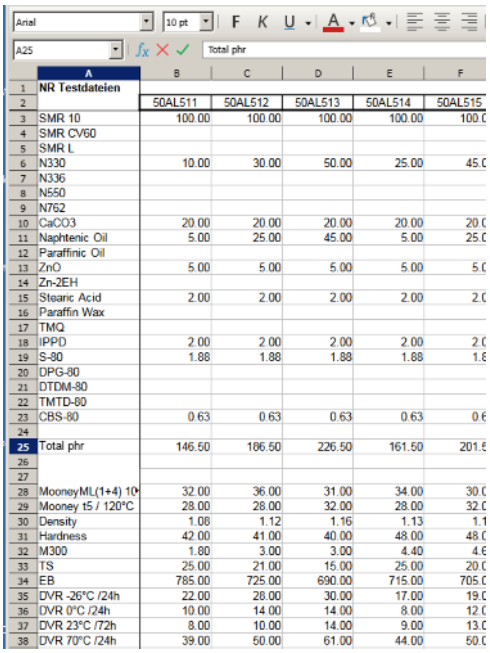
The table can be copied directly into GrafCompounder using the “Paste cells here” function (Fig: 2). This step transfers all values correctly, but does not yet activate any calculation logic.

Unrecognized Table Structure

After insertion, all entries appear in black formatting. This indicates that the software has not identified any functional structure. As a result, no calculations or evaluations can be performed at this stage.

Defining the Structure

To enable functionality, the table must be structured using predefined keywords: Ingredients: / Properties: / Recipes:
These keywords define how GrafCompounder



	A	B	C	D	E	F
1	NR Testdateien					
2		50AL511	50AL512	50AL513	50AL514	50AL515
3	SMR 10	100.00	100.00	100.00	100.00	100.0
4	SMR CV60					
5	SMR L					
6	N330	10.00	30.00	50.00	25.00	45.0
7	N336					
8	N550					
9	N762					
10	CaCO3	20.00	20.00	20.00	20.00	20.0
11	Naphtenic Oil	5.00	25.00	45.00	5.00	25.0
12	Paraffinic Oil					
13	ZnO	5.00	5.00	5.00	5.00	5.0
14	Zn-2EH					
15	Stearic Acid	2.00	2.00	2.00	2.00	2.0
16	Paraffin Wax					
17	TMQ					
18	IPPD	2.00	2.00	2.00	2.00	2.0
19	S-80	1.88	1.88	1.88	1.88	1.8
20	DPG-80					
21	DTDM-80					
22	TMTD-80					
23	CBS-80	0.63	0.63	0.63	0.63	0.6
24						
25	Total phr	146.50	186.50	226.50	161.50	201.5
26						
27						
28	MooneyML(1+4) 10	32.00	36.00	31.00	34.00	30.0
29	Mooney t5 / 120°C	28.00	28.00	32.00	28.00	32.0
30	Density	1.08	1.12	1.16	1.13	1.1
31	Hardness	42.00	41.00	40.00	48.00	48.0
32	M300	1.80	3.00	3.00	4.40	4.6
33	TS	25.00	21.00	15.00	25.00	20.0
34	EB	785.00	725.00	690.00	715.00	705.0
35	DVR -26°C /24h	22.00	28.00	30.00	17.00	19.0
36	DVR 0°C /24h	10.00	14.00	14.00	8.00	12.0
37	DVR 23°C /72h	8.00	10.00	14.00	9.00	13.0
38	DVR 70°C /24h	39.00	50.00	61.00	44.00	50.0

Fig. 1: Sarting table with an Ecxel File

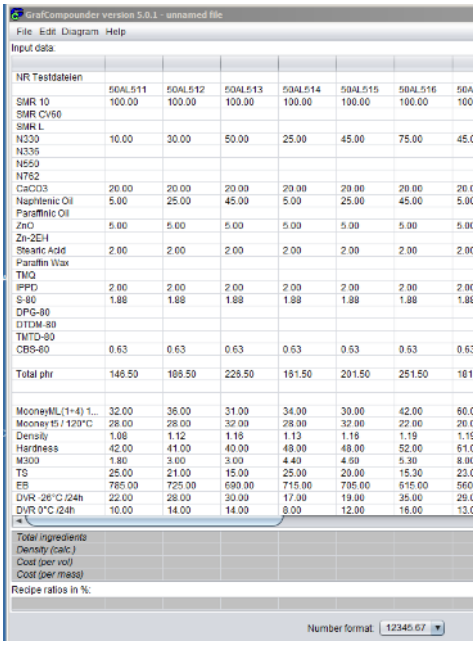


Fig. 2: Table transferred with "paste cells here" into GrafCompounder program

interprets the data. Once inserted at the correct positions, the system immediately recognizes ingredients, recipes, and properties as such.

System Response

After correct definition, the table updates automatically (Fig 3). Formatting changes indicate that the structure is now valid and calculations are enabled. The user can immediately continue working with the dataset.

Handling Additional Rows

Rows such as “Total phr” are not required, since GrafCompounder calculates totals internally. If such rows remain in the table, they are ignored by the system indicated through letters/numbers in black. For clarity and consistency, their removal is recommended.

Alternative Workflow

As an alternative, the required structure can already be defined in the Excel file before import. This approach leads to the same result, while reducing manual adjustments after pasting.

Completion of the Table

For full functionality, additional parameters such as density and cost must be included. As with all structural elements, correct spelling and formatting are essential for automatic recognition by the software, for example **Cost:** and /or **Density:**.

Summary

A pasted table becomes functional only after its structure is clearly defined.
By assigning the keywords **Ingredients:**, **Recipes:**, and **Properties:**, GrafCompounder can interpret the data and enable calculations immediately.

Once this principle is understood, importing and preparing formulation tables becomes a fast and reliable process.

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2023-01-06
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	50AL511	50AL512	50AL513		
NR Testdateien	**Recipes:**				
Ingredients:	50AL511	50AL512	50AL513	50AL514	50AL515
SMR 10	100.00	100.00	100.00	100.00	100.00
SMR CV60					
SMR L					
N330	10.00	30.00	50.00	25.00	45.00
N336					
N550					
N762					
CaCO3	20.00	20.00	20.00	20.00	20.00
Naphtenic Oil	5.00	25.00	45.00	5.00	25.00
Paraffinic Oil					
ZnO	5.00	5.00	5.00	5.00	5.00
Zn-2EH					
Stearic Acid	2.00	2.00	2.00	2.00	2.00
Paraffin Wax					
TMQ					
IPPD	2.00	2.00	2.00	2.00	2.00
S-80	1.88	1.88	1.88	1.88	1.88
DPG-80					
DTDM-80					
TMTD-80					
CBS-80	0.63	0.63	0.63	0.63	0.63
Total phr	146.50	186.50	226.50	161.50	201.50
Properties:					
MooneyML(1+4) 100°C	32.00	36.00	31.00	34.00	30.00
Mooney t5 / 120°C	28.00	28.00	32.00	28.00	32.00
Density	1.08	1.12	1.16	1.13	1.16
Hardness	42.00	41.00	40.00	48.00	48.00
M300	1.80	3.00	3.00	4.40	4.60
TS	25.00	21.00	15.00	25.00	20.00
EB	765.00	725.00	690.00	715.00	705.00
DVR -26°C /24h	22.00	28.00	30.00	17.00	19.00
DVR 0°C /24h	10.00	14.00	14.00	8.00	12.00
Total ingredients	*146.51*	*186.51*	*226.51*	*161.51*	*201.51*
Density (calc.)					
Cost (per vol)					
Cost (per mass)					
Recipe ratios in %:					

Fig 3: Table after keyword insertion and automatic reformatting

Please see tutorial on website:
www.grafcompounder.de