The **cookingsymbols** package[*]

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December 28, 2014

Abstract

This package is intended to support mainly developers of recipe templates with often used symbols. The symbols are build by using METAFONT.

Change History

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[*]This document corresponds to **cookingsymbols** v1.1, dated 2014/12/28.

Contents

1 Introduction

This package includes 11 symbols. They are original created, when I was searching for symbols for typesetting recipes. However, I didn't find any symbols, so I decided to create my own ones. This is the result ;)

At the end of creating these symbols, I realized that METAFONT is out of date. But at this time, I had no time to create the same symbols as vector based fonts. This is still a task for the future.

2 Symbols

The following symbols are created by this package and are available by these macros. **Important:** The symbols are enhanced for a better view (by \Large).

Macro	Symbol
\Oven	
\Topbottomheat	
\Topheat	
\Bottomheat	
\Fanoven	
\Gasstove	
\Dish	
\Knife	
\Fork	
\Spoon	
\Gloves	

And now have fun with these new symbols!

3 Implementation

3.1 cookingsymbols.sty

The following content can be found in the derived file cookingsymbols.sty. It includes the macros for an easy access and the definition of the (new) font.

```
1 ⟨∗package⟩
2
3 \DeclareFontFamily{U}{cookingsymbols}{}
4
5 \DeclareFontShape{U}{cookingsymbols}{m}{n}{<-> cookingsymbols}{}
6 \DeclareFontShape{U}{cookingsymbols}{bx}{n}{<-> sub cookingsymbols/m/n }{}
7
8 \newcommand{\Oven}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{0}}}
9 \newcommand{\Topbottomheat}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{1}}}
10 \newcommand{\Topheat}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{2}}}
```

```
11 \newcommand{\Bottomheat}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{3}}}
12 \newcommand{\Fanoven}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{4}}}
13 \newcommand{\Gasstove}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{5}}}
14 \newcommand{\Dish}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{6}}}
15 \newcommand{\Knife}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{7}}}
16 \newcommand{\Fork}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{8}}}
17 \newcommand{\Spoon}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{9}}}
18 \newcommand{\Gloves}{{\usefont{U}{cookingsymbols}{m}{n}\symbol{10}}}
19
20 ⟨/package⟩
```

3.2 cookingsymbols.mf

The following content can be found in the derived file cookingsymbols.mf. In this file the symbols are defined by using METAFONT.

```
21 ⟨∗mf⟩
22
23 mode_setup;
24
25 font_coding_scheme = "cookingsymbols for recipes";
26 font_identifier = "cookingsymbols";
27
28 u#:=0.68pt#;
29 define_pixels(u);
30
31 font_size 10pt#;
32 %design_size=10pt#;
33 linewidth=0.4pt;
34
35 thinpen.w := 0.5linewidth;
36 pen normalpen, thinpen;
37 normalpen := pencircle scaled 1linewidth;
38 thinpen := pencircle scaled thinpen.w;
39
```

3.2.1 Oven

```
40 %% oven symbol
41 "Oven";
42 beginchar(0,10u#,10u#,0);
43   pickup pencircle scaled 0.75 linewidth;
44
45   % Umrandung
46   y1=y2; y3=y4;
47   x1=x4; x2=x3;
48   x2-x1=w;
49   y2-y3=h;
50   z4=(0u, 0u);
51   draw z1--z2--z3--z4--cycle;
```

4

```
52
53    % Ofenklappe
54    r:=1u; % Radius
55    z5=z4+(r+0.7u, 0.7u);
56    x5=x8; x6=x7;
57    x9=x12; x10=x11;
58    y5=y12; y6=y11;
59    y7=y10; y8=y9;
60
61    z6=z5+(-r, r);
62    z8=z7+(r,r);
63    z10=z9+(r,-r);
64    x11-x6=w-1.4u; % Breite
65    y8-y5=6.3u; % Höhe
66
67    fill z5{left}..z6{up}..z7{up}..z8{right}..z9{right}..z10{down}..z11{down}..z12{left}..cycle;
68
69    % Ofengriff
70    b:=3.2u; % Breite vom Griff
71    h1:=0.5u; % Höhe
72    z14=z8+((x9-x8)/2-b/2, -0.8u);
73    x14=x13; x15=x16;
74    x16=x13+b;
75    y14=y13+h1;
76    y15=y14;
77    y16=y13;
78
79    unfill z13--z14--z15--z16--cycle;
80
81    % Display
82    b:=2.8u; % Breite vom Display
83    h1:=1.05u;    % Höhe
84    z17=z1+(0.8u, -1u);
85    x18=x19; x20=x17;
86    y18=y17; y19=y20;
87    x18-x17=b;
88    y18-y19=h1;
89
90    fill z17--z18--z19--z20--cycle;
91
92    % Knöpfe
93    r:=0.48u; % Radius der Knöpfe
94    b:=1.3u; % Abstand der Knöpfe untereinander
95    h1:=y19+(y18-y19)/2;
96    x:=x18+0.8u;
97    x21=x23; y24=y22;
98    z24=(x,h1);
99    z23=(x+r,h1-r);
100   x22=x24+2*r;
101   y21=y23+2*r;
```

```
102    %fill z21..z22..z23..z24..cycle;
103
104    for i=0 upto 3:
105      fill (z21+(i*1b,0))..(z22+(i*b,0))..(z23+(i*b,0))..(z24+(i*b,0))..cycle;
106    endfor
107
108    %labels(range 1 thru 24);
109 endchar;
110
```

3.2.2   Top and bottom heat

```
111 %% top and bottomheat symbol
112 "Topbottomheat";
113 beginchar(1,11u#,10u#,0);
114    pickup normalpen;
115    % Umrandung
116    ra:=1.0u; % Radius der Umrandung
117    y1=y4; y2=y3;
118    y5=y8; y6=y7;
119    x1=x8; x2=x7;
120    x3=x6; x4=x5;
121
122    z2=z1+(ra,ra);
123    z4=z3+(ra,-ra);
124    z8=z7+(-ra,ra);
125    x4-x1=w;
126    y2-y7=h;
127    z8=(0,ra);
128
129    draw z1{up}..z2{right}..z3{right}..z4{down}..z5{down}..z6{left}..z7{left}..z8{up}..cycle;
130
131    % Stäbe
132    pickup pensquare scaled 1.15linewidth;
133    % Oberhitze
134    xa:=1.4u; % Abstand zum Rand
135    ya:=1.85u;
136    z9=(xa, (y2-y7)-ya);
137    x10=(x4-x1)-xa;
138    y10=y9;
139    draw z9..z10;
140
141    % Unterhitze
142    x11=x9;x12=x10;
143    y11=ya;
144    y12=y11;
145    draw z11..z12;
146
147    %labels(range 1 thru 12);
148
149 endchar;
```

3.2.3 Top heat

This is nearly the same definition as Topbottomheat, except there is only one rod.

```
151 %% top heat symbol
152 "Topheat";
153 beginchar(2,11u#,10u#,0);
154   pickup normalpen;
155   % Umrandung
156   ra:=1.0u; % Radius der Umrandung
157   y1=y4; y2=y3;
158   y5=y8; y6=y7;
159   x1=x8; x2=x7;
160   x3=x6; x4=x5;
161
162   z2=z1+(ra,ra);
163   z4=z3+(ra,-ra);
164   z8=z7+(-ra,ra);
165   x4-x1=w;
166   y2-y7=h;
167   z8=(0,ra);
168
169   draw z1{up}..z2{right}..z3{right}..z4{down}..z5{down}..z6{left}..z7{left}..z8{up}..cycle;
170
171   % Stäbe
172   pickup pensquare scaled 1.15linewidth;
173   % Oberhitze
174   xa:=1.4u; % Abstand zum Rand
175   ya:=1.85u;
176   z9=(xa, (y2-y7)-ya);
177   x10=(x4-x1)-xa;
178   y10=y9;
179   draw z9..z10;
180
181 endchar;
182
```

3.2.4 Bottom heat

This is nearly the same definition as Topbottomheat, except there is only one rod.

```
183 %% bottom heat symbol
184 "Bottomheat";
185 beginchar(3,11u#,10u#,0);
186   pickup normalpen;
187   % Umrandung
188   ra:=1.0u; % Radius der Umrandung
189   y1=y4; y2=y3;
190   y5=y8; y6=y7;
191   x1=x8; x2=x7;
```

```
192    x3=x6; x4=x5;
193
194    z2=z1+(ra,ra);
195    z4=z3+(ra,-ra);
196    z8=z7+(-ra,ra);
197    x4-x1=w;
198    y2-y7=h;
199    z8=(0,ra);
200
201    draw z1{up}..z2{right}..z3{right}..z4{down}..z5{down}..z6{left}..z7{left}..z8{up}..cycle;
202
203    % Stäbe
204    pickup pensquare scaled 1.15linewidth;
205    % Oberhitze
206    xa:=1.4u; % Abstand zum Rand
207    ya:=1.85u;
208    z9=(xa, (y2-y7)-ya);
209    x10=(x4-x1)-xa;
210    y10=y9;
211
212    % Unterhitze
213    x11=x9;x12=x10;
214    y11=ya;
215    y12=y11;
216    draw z11..z12;
217
218 endchar;
219
```

3.2.5 Fanoven

```
220 %% fanoven symbol
221 "Fanoven";
222 beginchar(4,11u#,10u#,0);
223    pickup normalpen;
224    % Umrandung
225    ra:=1.0u; % Radius der Umrandung
226    y1=y4; y2=y3;
227    y5=y8; y6=y7;
228    x1=x8; x2=x7;
229    x3=x6; x4=x5;
230
231    z2=z1+(ra,ra);
232    z4=z3+(ra,-ra);
233    z8=z7+(-ra,ra);
234    x4-x1=w;
235    y2-y7=h;
236    z8=(0,ra);
237
238    draw z1{up}..z2{right}..z3{right}..z4{down}..z5{down}..z6{left}..z7{left}..z8{up}..cycle;
```

```
239
240   % Propeller
241   z15=(w/2,(h/2)-1.05u); % Rotationspunkt
242   a:=1.3; % Skalierungsfaktor
243   z9=z15+a*(0.95u,2.66u);
244   %z9=z15+(0.8u,3u);
245   y10=y9;
246   x10=w-x9;
247   z11=z9 rotatedaround(z15,120);
248   z12=z10 rotatedaround(z15,120);
249   z13=z9 rotatedaround(z15,-120);
250   z14=z10 rotatedaround(z15,-120);
251
252   z16=z15 + a*(0,4u);
253   z17=z16 rotatedaround(z15,120);
254   z18=z16 rotatedaround(z15,-120);
255
256   fill z9{dir 90}..z16{dir 180}..z10{dir 270}..z13{dir -30}..z18{dir 60}..z14{dir 150}..z11{dir 210}.
257
258   %labels(range 1 thru 18);
259 endchar;
260
```

3.2.6   Gasstove

```
261 %% gasstove symbol
262 "Gasstove";
263 beginchar(5,11u#,10u#,0);
264   pickup normalpen;
265   % Umrandung
266   ra:=1.0u; % Radius der Umrandung
267   y1=y4; y2=y3;
268   y5=y8; y6=y7;
269   x1=x8; x2=x7;
270   x3=x6; x4=x5;
271
272   z2=z1+(ra,ra);
273   z4=z3+(ra,-ra);
274   z8=z7+(-ra,ra);
275   x4-x1=w;
276   y2-y7=h;
277   z8=(0,ra);
278
279   draw z1{up}..z2{right}..z3{right}..z4{down}..z5{down}..z6{left}..z7{left}..z8{up}..cycle;
280
281   % Flamme
282   z9=(w/2,1.0u); % Ursprung
283   z10=(w/2,9u);  % Endpunkt
284   z11=z9+(-1.4u, 3.1u);
285   x12=w-x11;y12=y11;
286   %z12=z9+(1.5u, 3.5u);
```

```
287
288   fill z9{dir 135}..z11{up}..z10{dir 70}--cycle;
289   %fill z9{dir 145}..z10{dir 65}--cycle;
290
291   fill z9{dir 45}..z12{up}..z10{dir 110}--cycle;
292
293   % Innere Flamme
294   z13=z9+(0,0.7u); % Urspung
295   z14=z13+(0, 3.7u); % Endpunkt
296   z15=z9+(-0.5u,2.1u);
297   z16=z9+(0.5u, 2.1u);
298
299   unfill z13{dir 130}..z15{up}..z14{dir 65}--cycle;
300
301   unfill z13{dir 60}..z16{up}..z14{dir 115}--cycle;
302
303   %labels(range 1 thru 16);
304
305 endchar;
306
```

3.2.7   Dish

This is the definition of two circles (with different radii).

```
307 %% dish symbol
308 "Dish";
309 beginchar(6,10u#,10u#,0);
310   pickup normalpen;
311   ra:=0.5h;
312   x1=x3;y4=y2;
313   z4=(0,ra);
314   z3=(ra,0);
315   x2=x4+2*ra;
316   y1=y3+2*ra;
317   draw z1..z2..z3..z4..cycle;
318
319   ri:=3.7u;
320   x5=x7;y8=y6;
321   z8=(ra-ri,ra);
322   z7=(ra,ra-ri);
323   y6=0.5*(y5-y7) + (ra-ri);
324   x5=0.5*(x6-x8) + (ra-ri);
325   draw z5..z6..z7..z8..cycle;
326
327 %  labels(range 1 thru 8);
328 endchar;
329
```

3.2.8   Knife

```
330 %% knife symbol
331 "Knife";
332 beginchar(7,1.7u#,10u#,0);
333   pickup normalpen;
334   b:=0.8u; % Breite des Stiels
335   z1=(w, 0u);
336   x2=x1-b; y2=y1;
337
338   z5=(x2,4.8u);
339   z6=z5+(-0.85u, 2u);
340   x7=x1; y7=y1+10u;
341
342
343   fill z1--z2--z5{dir 150}..z6{up}..z7--cycle;
344
345   %labels(range 1 thru 11);
346
347 endchar;
348
```

3.2.9   Fork

```
349 %% fork symbol
350 "Fork";
351 beginchar(8,2u#,10u#,0);
352   pickup normalpen;
353
354   b:=0.8u;  % Breite des Stiels
355   zb:=0.2u; % Zackenbreite
356   za=0.4u;  % Zackenabstand
357   z1=(w/2+b/2, 0u);
358   x2=x1-b; y2=y1;
359   x3=x2; y3=y2+6u;
360   x4=x1; y4=y3;
361
362   fill z1--z2--z3--z4--cycle;
363
364   x5=x3-(4*zb+3*za)/2 +b/2;
365   y5=y3+1.9u;
366   x6=x5; y6=y5+2.1u;
367   x7=x6+zb; y7=y6;
368   x8=x7; y8=y5;
369
370   x9=x8+za; y9=y8;
371   x10=x9; y10=y6;
372   x11=x10+zb; y11=y10;
373   x12=x11; y12=y9;
374
375   x13=x12+za; y13=y12;
376   x14=x13; y14=y6;
377   x15=x14+zb; y15=y14;
```

```
378   x16=x15; y16=y5;
379
380   x17=x16+za; y17=y16;
381   x18=x17; y18=y6;
382   x19=x18+zb; y19=y18;
383   x20=x19; y20=y5;
384
385   fill z3{dir 130}..z5{up}--z6--z7--z8--z9--z10--z11--z12--z13--z14--z15--z16--z17--z18--z19--z20{dow
386
387   %labels(range 1 thru 20);
388
389 endchar;
390
```

3.2.10   Spoon

```
391 %% spoon symbol
392 "Spoon";
393 beginchar(9, 3.4u#, 10u#,0);
394   pickup normalpen;
395
396   b:=0.8u;  % Breite des Stiels
397   % Stiel
398   z1=(w/2+b/2, 0u);
399   x2=x1-b; y2=y1;
400   x3=x2; y3=y2+5.74u;
401   x4=x1; y4=y3;
402
403   fill z1--z2--z3--z4--cycle;
404
405   % Oberteil
406   x5=x3-1.0u;
407   x6=x4+(x3-x5);
408   y5=y6=y3+(y7-y3)/2 - 0.2u; % halbe Breite
409   z7=(x3+(x4-x3)/2, y3+4u); % y: maximale Ausdehnung
410
411   draw z7{dir -170}..z5{down}..(x3+(x4-x3)/2, y3){dir -10};
412   draw (x3+(x4-x3)/2, y3){dir 10}..z6{up}..z7{dir 170};%..(z7-(b/2, 0));
413
414   %labels(range 1 thru 12);
415 endchar;
416
```

3.2.11   Gloves

```
417 %% gloves symbol
418 "Gloves";
419 beginchar(10,10.4u#,10u#,0);
420   pickup thinpen;
421
422   a:=1.05; % Skalierungsfaktor
423   breite:=a*4.3u; % Breite unten am Handschuh
```

```
424    hoehe:=a*1.8u;

425

426    z5=a*(3.3u-0.4u, 3u); % Rotationspunkt 1. Handschuh
427    z9=z5 + a*(-0.55u, 0.1u); % Rotationspunkt 2. Handschuh
428    alpha:=-37; % Rotationswinkel -37
429    beta:=-26;  % Verschiebung des zweiten Handschuhs bzgl. des oberen

430

431    % Oberer Handschuh
432    z4=(0.8u, 1u);
433    x1=x4; x2=x3;
434    y1=y2; y3=y4;
435    x2-x1=breite;
436    y1-y4=hoehe;

437

438    fill z1--z2--z3--z4--cycle rotatedaround(z5, alpha);

439

440    % Daumen
441    z7=z1 + a*(0.5thinpen.w+0.2u, 3.5u);
442    z6=z7 + a*(-1.2u, 1.3u);

443

444    draw ((z1+(0.5thinpen.w,0)){up}..z6{dir 75}..z7{dir -80}) rotatedaround(z5, alpha);

445

446    % Oberer Rand/Begrenzung
447    z8=z1 + ((x2-x1)/2 + a*0.2u, a*8.2u);

448

449    draw (z7{dir 90}..z8{right}..(z2+(-0.5thinpen.w,0)){dir -90}) rotatedaround(z5, alpha);

450

451

452

453    % Zweiter Handschuh
454    fill z1--(z1-(-a*0.8u, (y1-y4)/2+a*0.6u))--z4--cycle rotatedaround(z9, alpha+beta);

455

456    fill z4--z2--z3--cycle rotatedaround(z9, alpha+beta);

457

458    %z10=z1 + a*(1u, 7.55u); % Schnittpunkt der beiden Handschuhe
459    z10=z1 + a*(1u, 7.75u);

460

461    draw (z10..z8{right}..z2{dir -90}) rotatedaround(z9, alpha+beta);

462

463

464

465    % 'Weier' Trennstrich
466    z11=z3 - (0, 0.5thinpen.w);
467    x12=x1; y12=y11;
468    unfill (z4--z3--z11--z12--cycle) rotatedaround(z5, alpha);

469

470

471    %labels(range 1 thru 20);
472  endchar;

473
```

```
474 end
475 ⟨/mf⟩
```

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