

carme

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **15**
- SRM **6.8**
- Style **Weizen/Weissbier**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **27.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **40 C**, Time **10 min**
- Temp **50 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **1 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **43.3C**
- Add grains
- Keep mash **10 min** at **40C**
- Keep mash **10 min** at **50C**
- Keep mash **30 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.4 kg (48%)	81 %	4
Grain	Karmelowy Jasny 30EBC	1.6 kg (32%)	75 %	30
Grain	Jęczmień niesłodowany	1 kg (20%)	75 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	40 g	40 min	4 %
Dry Hop	Lublin (Lubelski)	60 g	7 day(s)	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
s33	Lager	Slant	200 ml	---