

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 niestodowany | 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 | --- |