

Bier de Garde II

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **19**
- SRM **7.5**
- Style **Bière de Garde**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **22.3 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **17.3 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Pilzneński | 3.8 kg (73.8%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ II | 0.7 kg (13.6%) | 79 % | 22 |
| Grain | Aromatic Malt | 0.25 kg (4.9%) | 78 % | 51 |
| Grain | Strzegom Karmel 300 | 0.1 kg (1.9%) | 70 % | 299 |
| Grain | Biscuit Malt | 0.1 kg (1.9%) | 79 % | 45 |
| Sugar | Candi Sugar, Clear | 0.2 kg (3.9%) | 78.3 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------|--------|--------|------------|
| Boil | Zula | 29 g | 30 min | 8.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------------------|-------|--------|---------|------------|
| WLP838 - Southern German Lager Yeast | Lager | Liquid | 3000 ml | White Labs |