

Bière de Garde (K)

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **20**
- SRM **8.7**
- Style **Bière de Garde**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **62 C**, Time **5 min**
- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **5 min** at **62C**
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Castlemalting - Pale Ale | 5 kg (60.2%) | 80 % | 8 |
| Grain | Castlemalting - Munich Malt | 1.5 kg (18.1%) | 80 % | 17 |
| Grain | Castlemalting - Vienna Malt | 0.7 kg (8.4%) | 78 % | 8 |
| Grain | Barley, Flaked | 0.5 kg (6%) | 70 % | 4 |
| Grain | Castlemalting Biscuit Malt | 0.15 kg (1.8%) | 79 % | 45 |
| Grain | Abbey Malt Weyermann | 0.15 kg (1.8%) | 75 % | 45 |
| Sugar | Candi Sugar, Clear | 0.3 kg (3.6%) | 78.3 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Sybilla | 20 g | 60 min | 3.5 % |
| Boil | Tomyski | 20 g | 60 min | 2.5 % |
| Boil | Sybilla | 20 g | 30 min | 3.5 % |
| Boil | Tomyski | 20 g | 30 min | 2.5 % |

| | | | | |
|---------------------|---------|------|--------|-------|
| Aroma (end of boil) | Sybilla | 10 g | 10 min | 3.5 % |
| Aroma (end of boil) | Tomyski | 10 g | 10 min | 2.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Wollsæter | Ale | Slant | 20 ml | Priv |
| 1 fermentor | | | | |
| Espe | Ale | Slant | 20 ml | Priv |
| 2 fermentor | | | | |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------|--------|-----------|----------|
| Fining | Żelatyna | 3 g | Secondary | 3 day(s) |
| Flavor | Płatki dębowe | 50 g | Secondary | 7 day(s) |