

PILS

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **23**
- SRM **2.6**
- Style **Vienna Lager**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **34.2 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **28.5 liter(s)**
- Total mash volume **34.2 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **28.5 liter(s)** of strike water to **55.2C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **34.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|--------|-----|
| Grain | Briess - Pilsen Malt | 5 kg (87.7%) | 80.5 % | 2 |
| Grain | Briess - Carapils Malt | 0.7 kg (12.3%) | 74 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------------|--------|--------|------------|
| Boil | Puławski | 15 g | 60 min | 8 % |
| Whirlpool | Puławski 80* | 45 g | 30 min | 8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------|
| safale w34/70 | Lager | Dry | 11.5 g | safale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------|--------|---------|--------|
| Fining | IRISH MOSS | 5 g | Boil | 10 min |