

bpa2

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **30**
- SRM **7.5**
- Style **Belgian Pale Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **19.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **17.7 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|--------|-----|
| Grain | castlemalting pilsen | 3 kg (76.1%) | 80.5 % | 3 |
| Grain | castle- Light Munich Malt | 0.22 kg (5.6%) | 82 % | 14 |
| Grain | Abbey Malt Weyermann | 0.4 kg (10.2%) | 75 % | 45 |
| Grain | red ale viking malt | 0.32 kg (8.1%) | 75 % | 70 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------|--------|--------|------------|
| Boil | styrian wolf | 10 g | 60 min | 14.9 % |
| Aroma (end of boil) | styrian wolf | 20 g | 5 min | 14.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|-------|--------|------------|
| WLP550 - Belgian Ale Yeast | Ale | Slant | 300 ml | White Labs |