

PiwoWarZone Best Bitter

- Gravity **11.2 BLG**
- ABV ---
- IBU **30**
- SRM **9.3**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **11 liter(s)**
- Total mash volume **15.4 liter(s)**

Steps

- Temp **66 C**, Time **90 min**

Mash step by step

- Heat up **11 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **90 min** at **66C**
- Sparge using **19.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | maris otter pale ale | 3.8 kg (86.4%) | 81 % | 5 |
| Grain | Caramel/Crystal Malt - 120L | 0.4 kg (9.1%) | 72 % | 200 |
| Grain | Wheat, Flaked | 0.2 kg (4.5%) | 77 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | pilgrim | 15 g | 60 min | 10.3 % |
| Aroma (end of boil) | pilgrim | 10 g | 15 min | 10.3 % |
| Aroma (end of boil) | pilgrim | 25 g | 5 min | 10.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------|------|--------|--------|-------------|
| Wyeast - London Ale III | Ale | Liquid | 125 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|------|
| Water Agent | kwas mlekowy | 4 g | Mash | --- |
| Water Agent | gips piwowarski | 2 g | Mash | --- |