

pale ALE B 3

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **21**
- SRM **4.7**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **66 C**, Time **50 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **50 min** at **66C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|--------------|-------|-----|
| Grain | PALE ALE/PILS BYDGOSZCZ | 5 kg (83.3%) | 82 % | 4.8 |
| Grain | MONACHIJSKI typ I BYDGOSZCZ | 1 kg (16.7%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | perle | 25 g | 60 min | 7.4 % |
| Aroma (end of boil) | szbilla | 25 g | 15 min | 4.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 100 ml | Safale |