

PALE ALE 12BLG

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **39**
- SRM **4.8**

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 **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **68 C**, Time **65 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **65 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|-----------------|--------|-----|
| Grain | Viking Pale Ale malt | 4 kg (67.8%) | 80 % | 5 |
| Grain | Monachijski | 0.75 kg (12.7%) | 80 % | 16 |
| Grain | Bestmalz Carmel Pils | 0.25 kg (4.2%) | 75 % | 5 |
| Grain | Płatki owsiane | 0.4 kg (6.8%) | 60 % | 3 |
| Grain | BESTMALZ - Best Minich | 0.5 kg (8.5%) | 80.5 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | Phoenix | 35 g | 60 min | 11 % |
| Aroma (end of boil) | Progress | 50 g | 5 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 12 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | whirlfloc | 12.5 g | Boil | 10 min |