

# BELGIAN PALE ALE V2 #61

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **28**
- SRM **6.7**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **120 min**
- Evaporation rate **9 %/h**
- Boil size **26.6 liter(s)**

## Mash information

- Mash efficiency **87.2 %**
- Liquor-to-grist ratio **4.37 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **24.6 liter(s)**

## Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount           | Yield | EBC |
|-------|--------------------------|------------------|-------|-----|
| Grain | Viking - pale ale        | 2.87 kg (62.7%)  | 79 %  | 6   |
| Grain | Viking - monachijski I   | 0.952 kg (20.8%) | 78 %  | 16  |
| Grain | Bestmalz - monachijski I | 0.188 kg (4.1%)  | 80 %  | 16  |
| Grain | Weyermann - Abbey        | 0.34 kg (7.4%)   | 75 %  | 45  |
| Grain | Weyermann - Carabelge    | 0.23 kg (5%)     | 74 %  | 30  |

## Hops

| Use for             | Name            | Amount | Time   | Alpha acid |
|---------------------|-----------------|--------|--------|------------|
| Boil                | Warrior         | 10 g   | 60 min | 14.7 %     |
| Aroma (end of boil) | Styrian Golding | 50 g   | 15 min | 4 %        |
| Aroma (end of boil) | Mosaic          | 5 g    | 5 min  | 12.1 %     |

## Yeasts

| Name                              | Type | Form  | Amount | Laboratory      |
|-----------------------------------|------|-------|--------|-----------------|
| Mangrove Jack's M47 Belgian Abbey | Ale  | Slant | 130 ml | Mangrove Jack's |

## Extras

| Type        | Name                | Amount | Use for | Time  |
|-------------|---------------------|--------|---------|-------|
| Water Agent | gips                | 3 g    | Mash    | ---   |
| Water Agent | kwask mlekowy [ml]  | 4.23 g | Mash    | ---   |
| Water Agent | epsom               | 1.5 g  | Mash    | ---   |
| Water Agent | chlorek wapnia [ml] | 3.44 g | Mash    | ---   |
| Fining      | mech irlandzki      | 3 g    | Boil    | 5 min |