

# Polskie pale ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **35**
- SRM **3.9**
- Style **Dortmunder Export**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **29.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **27.5 liter(s)**

## Steps

- Temp **51 C**, Time **15 min**
- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **22 liter(s)** of strike water to **54.9C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **60 min** at **67C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5.5 kg (100%) | 80 %  | 5   |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 30 g   | 60 min | 10 %       |
| Boil    | Izabella          | 20 g   | 20 min | 5.1 %      |
| Boil    | Lublin (Lubelski) | 20 g   | 5 min  | 4 %        |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 500 ml | ---        |