

## Apa, dobrze dla drożdży

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **4.3**
- Style **American Pale 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 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

### Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **17.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **30 min** at **72C**
- 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 Pilsner malt  | 4.5 kg (76.3%) | 82 %  | 4   |
| Grain | Pszeniczny           | 0.5 kg (8.5%)  | 85 %  | 4   |
| Grain | Monachijski          | 0.2 kg (3.4%)  | 80 %  | 16  |
| Grain | Płatki owsiane       | 0.5 kg (8.5%)  | 85 %  | 3   |
| Grain | Abbey Malt Weyermann | 0.2 kg (3.4%)  | 75 %  | 45  |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 30 g   | 60 min | 7.4 %      |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 300 ml | Fermentis  |