

# Pils - Zestaw Browamator

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **33**
- SRM **3.6**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **24.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.6 liter(s)**
- Total mash volume **19.5 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **14.6 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **24.7 liter(s)** of wort

## Fermentables

| Type  | Name                              | Amount          | Yield | EBC |
|-------|-----------------------------------|-----------------|-------|-----|
| Grain | Weyermann - Bohemian Pilsner Malt | 4.63 kg (94.9%) | 81 %  | 4   |
| Grain | Weyermann - Carapils              | 0.25 kg (5.1%)  | 78 %  | 4   |

## Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Saaz (Czech Republic) | 50 g   | 60 min | 4.5 %      |
| Boil    | Saaz (Czech Republic) | 20 g   | 15 min | 4.5 %      |
| Boil    | Saaz (Czech Republic) | 30 g   | 5 min  | 4.5 %      |

## Yeasts

| Name             | Type  | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry  | 23 g   | Fermentis  |

## Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g    | Boil    | 15 min |