

# Pils (Pils Bodeński), Czesław Dziełak (Dagome)

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **43**
- SRM **4.1**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.1 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **27.5 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **71 C**, Time **30 min**
- Temp **76 C**, Time **3 min**

## Mash step by step

- Heat up **22.1 liter(s)** of strike water to **68.3C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **71C**
- Keep mash **3 min** at **76C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński         | 5 kg (92.6%)  | 80 %  | 4   |
| Grain | Strzegom Monachijski typ II | 0.2 kg (3.7%) | 79 %  | 22  |
| Grain | Weyermann - Carapils        | 0.2 kg (3.7%) | 78 %  | 4   |

## Hops

| Use for | Name                    | Amount | Time   | Alpha acid |
|---------|-------------------------|--------|--------|------------|
| Boil    | Magnum                  | 10 g   | 60 min | 15 %       |
| Boil    | Hallertau Spalt Select, | 40 g   | 60 min | 5 %        |
| Boil    | Hallertau Hersbrucker,  | 15 g   | 15 min | 3.1 %      |
| Boil    | Tettnanger              | 15 g   | 15 min | 3.8 %      |
| Boil    | Hallertau Hersbrucker   | 15 g   | 1 min  | 3.1 %      |
| Boil    | Tettnanger              | 15 g   | 1 min  | 3.6 %      |

## Yeasts

| <b>Name</b>             | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|-------------------------|-------------|-------------|---------------|-------------------|
| FM31 Bawarska<br>Dolina | Lager       | Liquid      | 20 ml         | Fermentum Mobile  |