

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

| Name | Type | Form | Amount | Laboratory |
|-------------------------|-------------|-------------|---------------|-------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 20 ml | Fermentum Mobile |