

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