

## Pils z resztek

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **35**
- SRM **4.6**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss --- %
- Size with trub loss **16 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.2 liter(s)**

### Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.1 liter(s)**
- Total mash volume **14.8 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **11.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (81.1%)	81 %	4
Grain	Strzegom Monachijski typ I	0.7 kg (18.9%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	8.1 %
Boil	Hallertau Mittelfruh	25 g	15 min	3 %
Boil	Hallertau Mittelfruh	25 g	1 min	3 %