Pils 1.5

- Gravity **12.4 BLG**
- ABV **---**
- IBU **43**
- SRM **4.2**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **29 liter(s)**
- Trub loss **5 %**
- Size with trub loss **30.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **36.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **26.5 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **2 min**

Mash step by step

- Heat up **19.9 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **2 min** at **76C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **36.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6 kg *(90.6%)*	80 %	4
Grain	Weyermann - Carapils	0.5 kg *(7.6%)*	78 %	4
Grain	Acid Malt	0.12 kg *(1.8%)*	58.7 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	42 g	60 min	9.5 %
Boil	Lublin (Lubelski)	25 g	30 min	4 %
Boil	Lublin (Lubelski)	20 g	15 min	4 %
Boil	Saaz	60 g	0 min	4.12 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Liquid	125 ml	Fermentum Mobile

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.