

Hoppy Pils - duże

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **36**
- SRM **3.5**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **150 liter(s)**
- Trub loss **5 %**
- Size with trub loss **157.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **189.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **105 liter(s)**
- Total mash volume **140 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **105 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **119.8 liter(s)** of **76C** water or to achieve **189.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	35 kg (100%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	337.5 g	60 min	6.5 %
Boil	Saaz (Czech Republic)	437.5 g	5 min	3.2 %
Dry Hop	Pink Boots Blend	375 g	2 day(s)	12 %
Dry Hop	Nelson Sauvín	625 g	2 day(s)	11 %