Italian Pils

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **45**
- SRM **3.5**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **18.5 liter(s)**
- Total mash volume **23.5 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.5 liter(s)** of strike water to **69.9C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg *(100%)*	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	25 g	60 min	10.6 %
Boil	Zula	25 g	20 min	10.6 %
Dry Hop	Zula	50 g	3 day(s)	10.6 %
Boil	Zula	25 g	0 min	10.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand NovaLager	Lager	Dry	22 g	Lallemand

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc-T	2.5 g	Boil	10 min
Water Agent	Calcium Sulphate	5 g	Mash	60 min
Water Agent	Lactic Acid	5 g	Mash	60 min

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