

# Wino

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **18**
- SRM **4.7**

## Batch size

- Expected quantity of finished beer **18.9 liter(s)**
- Trub loss **7 %**
- Size with trub loss **20.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **9 %/h**
- Boil size **24.4 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.51 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.5 liter(s)**

## Steps

- Temp **64 C**, Time **65 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **65 min** at **64C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **24.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner (2 Row) Ger	5 kg (77%)	81 %	4
Grain	Briess - Pale Ale Malt	1 kg (15.4%)	80 %	7
Grain	Rice, Flaked	0.5 kg (7.7%)	70 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	9.92 g	60 min	7 %
Boil	Challenger	9.92 g	20 min	7 %
Boil	Nelson Sauvín	9.92 g	10 min	11 %
Boil	Nelson Sauvín	9.92 g	5 min	11 %
Dry Hop	Nelson Sauvín	79.95 g	4 day(s)	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London ESB Ale	Ale	Liquid	100.6 ml	Wyeast Labs