

# Wino

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **18**
- SRM **4.5**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **7 %**
- Size with trub loss **21.7 liter(s)**
- Boil time **70 min**
- Evaporation rate **9 %/h**
- Boil size **26.1 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 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 **9.8 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount        | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Pilsner (2 Row) Ger    | 5 kg (76.9%)  | 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    | 10 g   | 60 min   | 7 %        |
| Boil    | Challenger    | 10 g   | 20 min   | 7 %        |
| Boil    | Nelson Sauvín | 10 g   | 10 min   | 11 %       |
| Boil    | Nelson Sauvín | 10 g   | 5 min    | 11 %       |
| Dry Hop | Nelson Sauvín | 80 g   | 4 day(s) | 11 %       |

## Yeasts

| Name                    | Type | Form   | Amount | Laboratory  |
|-------------------------|------|--------|--------|-------------|
| Wyeast - London ESB Ale | Ale  | Liquid | 100 ml | Wyeast Labs |