

## A KOMU TO POTRZEBNE?

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **72**
- SRM **16.7**
- Style **Irish Red Ale**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **22.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (26.7%)	81 %	4
Grain	colorado pale base	2 kg (26.7%)	81 %	6
Grain	Bestmalz Red X	2 kg (26.7%)	79 %	30
Grain	crystal red	0.5 kg (6.7%)	81 %	400
Grain	Strzegom Pale Ale	1 kg (13.3%)	79 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	45 min	13.5 %
Boil	Centennial	15 g	30 min	10.5 %
Boil	Fuggles	20 g	30 min	4.5 %
Boil	Centennial	15 g	15 min	10.5 %
Boil	Fuggles	15 g	15 min	4.5 %
Boil	Magnum	20 g	30 min	13.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	20 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Herb	hibiskus	20 g	Secondary	1 day(s)