

# Grand Champion 2013 17,5L 15,2 blg Robobrew

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **60**
- SRM **5.8**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **17.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.3 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.8 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **77 C**, Time **4 min**

## Mash step by step

- Heat up **14.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **71C**
- Keep mash **4 min** at **77C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (80.8%)	80 %	3.85
Grain	Strzegom Monachijski typ I	0.3 kg (6.1%)	79 %	16
Grain	Weyermann pszeniczny jasny	0.5 kg (10.1%)	80 %	6
Grain	Weyermann Caramunich II	0.15 kg (3%)	73 %	120

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	13.5 %
Boil	Mosaic	25 g	15 min	13.6 %
Boil	Centennial	17 g	10 min	10.2 %
Boil	Simcoe	17 g	5 min	13.2 %
Boil	Citra	17 g	1 min	13.5 %
Boil	Simcoe	25 g	0 min	11.4 %
Dry Hop	Centennial	33 g	4 day(s)	10.5 %
Dry Hop	Amarillo	33 g	4 day(s)	8.9 %

Dry Hop	Mosaic	33 g	4 day(s)	11.4 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek wapnia	6.5 g	Boil	80 min