

# Grand Champion 2013 (prawie)

- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **118**
- SRM **6.8**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **80 min**
- Evaporation rate **6 %/h**
- Boil size **28.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **32.2 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **4 min**

## Mash step by step

- Heat up **23.5 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **4 min** at **77C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (51.5%)	80 %	3.85
Grain	Strzegom Monachijski typ I	1 kg (10.3%)	79 %	16
Grain	Weyermann pszeniczny jasny	1 kg (10.3%)	80 %	6
Grain	Biscuit Malt	0.3 kg (3.1%)	79 %	45
Sugar	Cukier	1 kg (10.3%)	100 %	0
Grain	Pale Ale	1.4 kg (14.4%)	80 %	7

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	50 g	60 min	11.2 %
Boil	Columbus/Tomahawk/Zeus	100 g	30 min	12.5 %
Boil	Simcoe	25 g	10 min	11.4 %
Boil	Citra	25 g	10 min	13.5 %
Boil	Amarillo	25 g	5 min	8.9 %
Boil	Amarillo	25 g	2 min	8.9 %
Boil	Simcoe	25 g	0 min	11.4 %

Dry Hop	Citra	25 g	4 day(s)	13.5 %
Dry Hop	Amarillo	25 g	4 day(s)	8.9 %
Dry Hop	Simcoe	25 g	4 day(s)	11.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	250 ml	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek wapnia	10 g	Boil	80 min