

## Double Ipa - 23-09-2020

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **103**
- SRM **9.6**
- Style **Imperial IPA**

### Batch size

- Expected quantity of finished beer **37 liter(s)**
- Trub loss **5 %**
- Size with trub loss **40.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **48.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **31.3 liter(s)**
- Total mash volume **43.8 liter(s)**

### Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **4 min**

### Mash step by step

- Heat up **31.3 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **4 min** at **76C**
- Sparge using **30 liter(s)** of **76C** water or to achieve **48.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	10 kg (74.1%)	81 %	4
Grain	Pszeniczny	1.5 kg (11.1%)	85 %	4
Sugar	cukier	1 kg (7.4%)	--- %	---
Grain	Strzegom Karmel 150	1 kg (7.4%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	magnum	60 g	60 min	14.5 %
Boil	Columbus/Tomahawk/Zeus	50 g	30 min	15.6 %
Boil	Chinook	50 g	15 min	13.8 %
Boil	Citra	50 g	15 min	12.3 %
Boil	Centennial	50 g	5 min	11.2 %
Dry Hop	Centennial	50 g	2 day(s)	10.5 %
Dry Hop	Chinook	100 g	2 day(s)	13 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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US-05	Ale	Slant	200 ml	---
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## Notes

- Wyszło 17 blg przy 21 litrach do nastawienia.  
2x chłodzenie wymiennikiem - 17,8 stopni - zadano gęstwę  
2x wyszło przez rurkę  
Fermentacja od 16 stopni  
W 4 dzień zwiększyłem do 18  
*Oct 31, 2019, 8:14 AM*