

## D-W-IPA #11

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- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **69**
- SRM **11.5**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **6.5 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **11.3 liter(s)**

### Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **79 C**, Time **1 min**

### Mash step by step

- Heat up **9.8 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **79C**
- Sparge using **22 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Liquid Extract	Bruntal ekstrakt słodowy pszeniczny	3.2 kg (50%)	80 %	30
Liquid Extract	Bruntal Pale Ale	1.7 kg (26.6%)	80 %	35
Grain	Płatki owsiane	0.5 kg (7.8%)	85 %	3
Grain	Viking Pale Ale malt	1 kg (15.6%)	80 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	60 min	13.5 %
Boil	Columbus/Tomahawk/Zeus	25 g	60 min	15.5 %
Aroma (end of boil)	Cascade	20 g	13 min	6 %
Aroma (end of boil)	Mosaic	20 g	7 min	10 %
Aroma (end of boil)	Citra	20 g	7 min	12 %
Dry Hop	Citra	30 g	4 day(s)	12 %
Dry Hop	Cascade	30 g	4 day(s)	6 %
Dry Hop	Mosaic	30 g	4 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11 g	---

## Notes

- 135zł - mniej niż 3zł/piwo

Warzenie - 31 X 2017  
Początkowa - 17 BLG  
Końcowa 4  
Burzliwa - 17/18C  
ABV - 7,5%  
CO2 - 2.4 ; glukozy - 20l  
Rozlew 18 XI 17  
*Oct 23, 2017, 11:12 PM*