

## Down Under Pale Ale 3

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- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **41**
- SRM **5.9**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **16.2 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **12.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.4 kg (59.3%)	80 %	5
Grain	Viking Pilsner malt	1 kg (24.7%)	82 %	4
Grain	Carahell	0.2 kg (4.9%)	77 %	26
Grain	cookie	0.15 kg (3.7%)	72 %	50
Grain	Platki owsiane	0.3 kg (7.4%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ella (AUS)	20 g	30 min	14.6 %
Aroma (end of boil)	Ella (AUS)	9 g	10 min	14.6 %
Aroma (end of boil)	Vic Secret	10 g	0 min	19.2 %
Dry Hop	Vic Secret	45 g	2 day(s)	19.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
wlp067	Ale	Liquid	40 ml	white labs