

## #117 Double IPA

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **60**
- SRM **4.8**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **4 %**
- Size with trub loss **18.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **14 %/h**
- Boil size **22.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **28.7 liter(s)**

### Steps

- Temp **65 C**, Time **65 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **22.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **65 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5.15 kg (82.7%)	80 %	4
Grain	Pszeniczny	0.88 kg (14.1%)	85 %	4
Grain	Weyermann - Carapils	0.2 kg (3.2%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	8 g	50 min	12.8 %
Boil	Chinook	14.8 g	50 min	12.8 %
Boil	lunga PL	6.7 g	50 min	10 %
Aroma (end of boil)	Simcoe	11 g	12 min	12.9 %
Aroma (end of boil)	Galaxy	15 g	12 min	14.2 %
Whirlpool	Columbus/Tomahawk/Zeus	32.5 g	2 min	16.5 %
Whirlpool	Enigma (AUS)	32.5 g	2 min	16.5 %
Whirlpool	Sabro	30 g	2 min	15 %
Dry Hop	Enigma (AUS)	57 g	3 day(s)	16.5 %
Dry Hop	Columbus/Tomahawk/Zeus	29 g	3 day(s)	16.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	120 ml	Danstar

## Extras

Type	Name	Amount	Use for	Time
Fining	WhirlFloc	2.5 g	Boil	12 min
Other	Witamina C	3.6 g	Secondary	3 day(s)