

Double IPA

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **73**
- SRM **5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **26.3 liter(s)**
- Total mash volume **33.8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **26.3 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (63.7%)	81 %	4
Grain	Briess - Pale Ale Malt	2 kg (25.5%)	80 %	7
Grain	Pszeniczny	0.5 kg (6.4%)	85 %	4
Sugar	Cukier biały	0.35 kg (4.5%)	100 %	1

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	60 min	16.5 %
Aroma (end of boil)	Centennial	25 g	5 min	10.5 %
Aroma (end of boil)	Amarillo	25 g	5 min	8.9 %
Aroma (end of boil)	Centennial	25 g	0 min	12.8 %
Boil	Amarillo	25 g	0 min	13.1 %
Dry Hop	Citra	50 g	3 day(s)	8.9 %
Dry Hop	Amarillo	50 g	3 day(s)	8.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

us-05	Ale	Dry	23 g	Fermentis
-------	-----	-----	------	-----------