

Johny Chmielony (West Coast IPA)

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **93**
- SRM **4.6**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (58.3%)	81 %	4
Grain	Castle Pale Ale	2 kg (33.3%)	80 %	8
Grain	Przeniczne	0.5 kg (8.3%)	83 %	4.5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	20 min	12 %
Boil	Amarillo	15 g	20 min	9.5 %
Boil	Simcoe	15 g	20 min	13.2 %
Boil	Citra	15 g	5 min	12 %
Boil	Amarillo	15 g	5 min	9.5 %
Boil	Simcoe	15 g	5 min	13.2 %
Boil	Citra	15 g	0 min	12 %
Boil	Amarillo	15 g	0 min	9.5 %
Boil	Simcoe	15 g	0 min	13.2 %
Aroma (end of boil)	Citra	15 g	85 min	12 %
dodać przy 85 stopniach				

Aroma (end of boil)	Amarillo	15 g	85 min	9.5 %
dodać przy 85 stopniach				
Aroma (end of boil)	Simcoe	15 g	85 min	13.2 %
dodać przy 85 stopniach				
Dry Hop	Citra	40 g	4 day(s)	12 %
Dry Hop	Amarillo	40 g	4 day(s)	9.5 %
Dry Hop	Simcoe	40 g	4 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Slant	20 ml	Fermentum Mobile