

IMPERATOR

- Gravity **19.6 BLG**
- ABV ---
- IBU **116**
- SRM **8.6**
- Style **Imperial IPA**

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 **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (62.5%)	81 %	4
Grain	Viking Pale Ale malt	1 kg (12.5%)	80 %	5
Grain	Monachijski	1 kg (12.5%)	80 %	16
Grain	Pszeniczny	0.5 kg (6.3%)	85 %	4
Grain	Strzegom Karmel 30	0.5 kg (6.3%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	40 g	60 min	9.5 %
Boil	Chinook	40 g	60 min	13 %
Boil	Cascade	20 g	15 min	6 %
Boil	Citra	30 g	15 min	12 %
Boil	Citra	20 g	10 min	12 %
Boil	Citra	40 g	5 min	12 %
Boil	Simcoe	25 g	5 min	13.2 %
Dry Hop	Simcoe	25 g	5 day(s)	13.2 %
Dry Hop	Citra	60 g	5 day(s)	12 %
Dry Hop	Chinook	10 g	5 day(s)	13 %

Dry Hop	Amarillo	10 g	5 day(s)	9.5 %
Dry Hop	Cascade	30 g	5 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	10 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	10 g	Mash	---