

Imperium 20

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **57**
- SRM **6.5**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **32 liter(s)**
- Trub loss **5 %**
- Size with trub loss **35.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **40 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.85 liter(s) / kg**
- Mash size **36.8 liter(s)**
- Total mash volume **49.7 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **73 C**, Time **30 min**
- Temp **76 C**, Time **2 min**

Mash step by step

- Heat up **36.8 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **73C**
- Keep mash **2 min** at **76C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **40 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	10 kg (77.5%)	80 %	5
Grain	Karmelowy Czerwony	0.4 kg (3.1%)	75 %	59
Grain	Pszeniczny	2 kg (15.5%)	85 %	4
Grain	Płatki owsiane	0.5 kg (3.9%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	50 g	60 min	13 %
Aroma (end of boil)	Chinook	50 g	10 min	13 %
Dry Hop	Centennial	200 g	3 day(s)	10.5 %
Boil	Cascade	30 g	60 min	6 %
Aroma (end of boil)	Cascade	20 g	10 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us05	Ale	Slant	350 ml	---