

# imperial ipa

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- Gravity **16.4 BLG**
- ABV ---
- IBU **80**
- SRM **10.1**
- Style **American Amber Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **0 %**
- Size with trub loss **25 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **31.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.7 liter(s)**
- Total mash volume **30.2 liter(s)**

## Steps

- Temp **53 C**, Time **13 min**
- Temp **64 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **75 C**, Time **4 min**

## Mash step by step

- Heat up **22.7 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **13 min** at **53C**
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **71C**
- Keep mash **4 min** at **75C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **31.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5.8 kg (76.7%)	75.29 %	7
Grain	Wheat Malt, Ger	0.73 kg (9.7%)	84 %	9
Grain	Monachijski typ I	0.51 kg (6.7%)	74.39 %	31
Grain	Karmelowy 30	0.22 kg (2.9%)	72.6 %	79
Grain	zakwaszajacy	0.3 kg (4%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Magnum	30 g	60 min	14 %
Boil	Centennial	25 g	60 min	10 %
Boil	Columbus (Tomahawk)	25 g	15 min	14 %
Boil	Simcoe	25 g	5 min	13 %
Boil	Citra	25 g	1 min	12 %
Dry Hop	Amarillo	50 g	0 day(s)	9.2 %
Dry Hop	Centennial	50 g	0 day(s)	10 %

Dry Hop	Simcoe	50 g	0 day(s)	13 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Slant	160 ml	Mangrove Jack's

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Gypsum (Calcium Sulfate)	8 g	Mash	60 min
Water Agent	mech irlandzki	6 g	Boil	10 min