

# imperial black ipa

- Gravity **19.8 BLG**
- ABV **8.7 %**
- IBU **83**
- SRM **27.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25 liter(s)**
- Total mash volume **33.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **25 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	7.5 kg (85.7%)	80 %	7
Grain	Carafa II	0.35 kg (4%)	70 %	812
Grain	Strzegom Czekoladowy jasny	0.5 kg (5.7%)	68 %	400
Sugar	cukier	0.4 kg (4.6%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	40 g	60 min	13.5 %
Boil	Marynka	30 g	45 min	10 %
Boil	Zythos	15 g	15 min	11 %
Boil	Summit	10 g	15 min	17 %
Boil	Zythos	15 g	5 min	11 %
Boil	Summit	20 g	5 min	17 %
Aroma (end of boil)	Zythos	30 g	0 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	180 ml	---