

## #20 Black New England IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **50**
- SRM **32.7**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

### Steps

- Temp **65 C**, Time **40 min**
- Temp **70 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **71.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **5.1 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (69.8%)	80 %	5
Grain	Pszeniczny	1 kg (23.3%)	85 %	4
Grain	Carafa III	0.3 kg (7%)	70 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	4 %
Boil	Cascade	20 g	30 min	8 %
Boil	Cascade	20 g	10 min	8 %
Boil	Cascade	16 g	5 min	8 %
Dry Hop	Mosaic	30 g	3 day(s)	10 %
Dry Hop	Sorachi Ace	30 g	3 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11.5 g	Fermentis