

# Black IPA III

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- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **65**
- SRM **40.9**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **40 %/h**
- Boil size **16.8 liter(s)**

## Mash information

- Mash efficiency **69.5 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale	2.8 kg (77.8%)	80 %	6
Grain	Weyermann - CaraHell	0.3 kg (8.3%)	74 %	25
Grain	Viking - Barwiący	0.5 kg (13.9%)	50 %	900

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	USA Tomahawk	15 g	60 min	15.8 %
Boil	USA Cascade	35 g	10 min	8.1 %
Boil	USA Chinook	35 g	0 min	12.8 %
Dry Hop	USA Chinook	15 g	3 day(s)	12.8 %
Dry Hop	USA Cascade	15 g	3 day(s)	8.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05 III	Ale	Slant	80 ml	---