Black IPA

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **75**
- SRM **37.6**
- Style **Black 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 **26.4 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **29.6 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **23.3 liter(s)** of strike water to **67.6C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg *(79.4%)*	85 %	7
Grain	Weyermann Specjal W	0.5 kg *(7.9%)*	68 %	300
Grain	Weyermann - Dehusked Carafa I	0.5 kg *(7.9%)*	70 %	690
Grain	Weyermann - Dehusked Carafa III	0.25 kg *(4.8%)*	70 %	1024

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	60 min	13 %
Boil	Chinook	15 g	30 min	13 %
Boil	Chinook	15 g	15 min	13 %
Boil	Vic Secret	15 g	15 min	16.3 %
Whirlpool	Vic Secret	15 g	20 min	16.3 %
Dry Hop	Chinook	40 g	7 day(s)	13 %
Dry Hop	Vic Secret	70 g	7 day(s)	16.3 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis