

Hoppy Darkness

- Gravity **17.3 BLG**
- ABV ---
- IBU **71**
- SRM **38.6**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **3 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6 kg (81.1%)	80 %	4
Grain	Strzegom Karmel 300	0.2 kg (2.7%)	70 %	299
Grain	Weyermann - Carafa II Special	0.6 kg (8.1%)	70 %	837
Grain	Special Roast	0.3 kg (4.1%)	72 %	99
Sugar	Brown Sugar, Light	0.3 kg (4.1%)	100 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	10 %
Boil	Nugget	25 g	45 min	15 %
Boil	Nugget	25 g	15 min	15 %
Boil	Columbus/Tomahawk/Zeus	15 g	10 min	15.5 %
Whirlpool	Citra	25 g	0 min	13 %
Dry Hop	Nugget	50 g	10 day(s)	15 %
Dry Hop	Citra	15 g	10 day(s)	13 %
Dry Hop	Columbus/Tomahawk/Zeus	25 g	10 day(s)	15.5 %

Yeasts

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

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	180 ml	Fermentis