Black Rye IPA

- Gravity **17.7 BLG**
- ABV **---**
- IBU **83**
- SRM **50.3**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **27.8 liter(s)**

Steps

- Temp **67 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **20.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg *(57.6%)*	79 %	6
Grain	Strzegom Monachijski typ I	1 kg *(14.4%)*	79 %	16
Grain	Żytni	1 kg *(14.4%)*	85 %	8
Grain	Strzegom Karmel 600	0.275 kg *(4%)*	68 %	601
Grain	Strzegom Pszeniczny	0.17 kg *(2.4%)*	81 %	6
Grain	Carafa III	0.5 kg *(7.2%)*	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	50 g	60 min	13 %
Boil	Chinook	30 g	20 min	13 %
Whirlpool	Chinook	20 g	0 min	13 %
Whirlpool	Eureka!	25 g	0 min	11 %
Whirlpool	Mosaic	25 g	0 min	10 %
Dry Hop	Eureka!	75 g	6 day(s)	11 %
Dry Hop	Mosaic	75 g	6 day(s)	10 %

Yeasts

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

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale