

Lutra Black IPA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **51**
- SRM **28.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **28.8 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **66 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **22.4 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **70 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **30.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	2.5 kg (39.1%)	81 %	5
Grain	Monachijski typ I 16 EBC Weyermann	2.3 kg (35.9%)	80 %	20
Grain	Płatki żytnie	0.8 kg (12.5%)	60 %	3
Grain	Weyermann - Caraaroma	0.5 kg (7.8%)	78 %	400
Grain	Carafa III	0.3 kg (4.7%)	70 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum PL	30 g	60 min	13 %
Boil	Galaxy	50 g	5 min	17.4 %
Boil	Simcoe	50 g	0 min	13.2 %
Dry Hop	Simcoe	50 g	5 day(s)	13.2 %
Dry Hop	Galaxy	50 g	5 day(s)	17.4 %