

**xd**

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **58**
- SRM **39.9**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3 kg (53.2%)	80 %	7
Grain	Strzegom Monachijski typ I	1 kg (17.7%)	79 %	16
Grain	Carahell	0.2 kg (3.5%)	77 %	26
Grain	Carafa II	0.15 kg (2.7%)	70 %	812
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg (3.5%)	73 %	1001
Grain	Jęczmień palony	0.05 kg (0.9%)	55 %	985
Grain	Karmelowy żytni Strzegom	0.2 kg (3.5%)	75 %	150
Grain	Viking Barwiący	0.04 kg (0.7%)	65 %	1400
Grain	Carafa III	0.1 kg (1.8%)	70 %	1034
Grain	Płatki owsiane	0.5 kg (8.9%)	60 %	3
Grain	Caraaroma	0.2 kg (3.5%)	78 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	10 g	30 min	13.2 %
Boil	Centennial	10 g	30 min	10.5 %
Boil	Amarillo	15 g	20 min	9.5 %
Boil	Mosaic	10 g	15 min	10 %
Boil	Centennial	15 g	5 min	10.5 %
Boil	Mosaic	15 g	5 min	10 %
Boil	Simcoe	10 g	60 min	13.2 %