

## Black ipa pazdz

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **41**
- SRM **29.1**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **29.2 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (41.1%)	80 %	5
Grain	Strzegom Pilzneński	1.5 kg (20.5%)	80 %	4
Grain	Strzegom Czekoladowy jasny	0.5 kg (6.8%)	68 %	400
Grain	Strzegom Monachijski typ I	0.7 kg (9.6%)	79 %	16
Grain	Płatki owsiane	0.4 kg (5.5%)	60 %	3
Grain	Jęczmień niesłodowany	0.4 kg (5.5%)	75 %	2
Grain	Strzegom Barwiący	0.3 kg (4.1%)	68 %	1300
Grain	Strzegom Wiedeński	0.5 kg (6.8%)	79 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Boil	Chinook	20 g	60 min	8 %
Boil	Cascade PL	30 g	10 min	5.2 %
Aroma (end of boil)	Chinook	20 g	2 min	8 %
Aroma (end of boil)	Tradition	30 g	2 min	5.5 %
Aroma (end of boil)	Cascade PL	20 g	2 min	5.2 %