

czarnypies

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **30**
- SRM **26.5**
- Style **Schwarzbier**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **12.2 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.2 kg (72.3%)	80 %	4
Grain	Strzegom Monachijski typ II	0.5 kg (16.4%)	79 %	22
Grain	Simpsons - Crystal Extra Dark	0.23 kg (7.6%)	74 %	475
Grain	Weyermann - Dehusked Carafa III	0.22 kg (3.7%)	70 %	1400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	20 g	60 min	6.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M54 Californian Lager	Lager	Dry	11 g	Mangrove Jack's