

Czarnuch by Kamil Soluch @piwo.org

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **39**
- SRM **31.3**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.6 liter(s)**
- Total mash volume **18.2 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (65.9%)	80 %	5
Grain	Strzegom Monachijski typ I	1 kg (22%)	79 %	16
Grain	Strzegom Czekoladowy ciemny	0.2 kg (4.4%)	68 %	1200
Grain	Jęczmień palony	0.35 kg (7.7%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Aroma (end of boil)	Marynka	10 g	10 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale