

czorny pszeniczok

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **18**
- SRM **17.8**
- Style **Dunkelweizen**

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 **15 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **23.1 liter(s)**

Steps

- Temp **45 C**, Time **20 min**
- Temp **67 C**, Time **50 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **20 min** at **45C**
- Keep mash **50 min** at **67C**
- Keep mash **1 min** at **76C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	2.8 kg (54.6%)	85 %	4
Grain	pszeniczny monachijski	0.6 kg (11.7%)	80 %	15
Grain	weyermann Czekoladowy ciemny pszeniczny	0.21 kg (4.1%)	68 %	1050
Grain	Strzegom Monachijski typ I	1.52 kg (29.6%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	14 g	60 min	12.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	400 ml	Fermentum Mobile