

Przeniczne ciemne 13 BLG

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **20**
- SRM **10.3**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.2 liter(s)**
- Total mash volume **18.2 liter(s)**

Steps

- Temp **45 C**, Time **10 min**
- Temp **53 C**, Time **15 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.2 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód pszeniczny jasny Weyermann	1.9 kg (46.9%)	82 %	5
Grain	Słód pilznerski Weyermann	1.3 kg (32.1%)	81 %	5
Grain	Strzegom Monachijski typ II	0.6 kg (14.8%)	79 %	25
Grain	Weyermann - Carawheat	0.2 kg (4.9%)	77 %	130
Grain	Czekoladowy	0.05 kg (1.2%)	60 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Comet	10 g	70 min	8.3 %
Boil	Comet	10 g	30 min	8.3 %
Boil	Comet	10 g	5 min	8.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
wb-06	Wheat	Dry	11.5 g	Safale