

Monachijskie Ciemne

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **21**
- SRM **15.5**
- Style **Munich Dunkel**

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 **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **22.2 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **16.6 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	2 kg (36%)	79 %	16
Grain	Strzegom Monachijski typ II	2 kg (36%)	79 %	22
Grain	Strzegom Wiedeński	1 kg (18%)	79 %	10
Grain	Słód Caramunich Typ II Weyermann	0.25 kg (4.5%)	73 %	120
Grain	Weyermann Specjal W	0.25 kg (4.5%)	68 %	300
Grain	Carafa	0.05 kg (0.9%)	70 %	664

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	40 g	60 min	4.5 %
Boil	Hallertau	10 g	15 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
W34/70	Lager	Dry	11 g	---