

Nowy Kozlak

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **22**
- SRM **18.4**
- Style **Classic Rauchbier**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.7 liter(s)**

Steps

- Temp **51 C**, Time **5 min**
- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.5 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **5 min** at **51C**
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	1.5 kg (29%)	79 %	22
Grain	Słód Wędzony Steinbach	1.4 kg (27.1%)	80 %	5
Grain	Słód Wędzony CM	1 kg (19.3%)	80 %	5
Grain	Słód Wędzony Weyerman	1 kg (19.3%)	80 %	5
Grain	Special B Malt	0.1 kg (1.9%)	65.2 %	315
Grain	Special W Malt	0.1 kg (1.9%)	65.2 %	400
Grain	Carafa II	0.07 kg (1.4%)	70 %	812

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %