

Kolsh nawet

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **30**
- SRM **3.6**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 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 **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **42 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **44.8C**
- Add grains
- Keep mash **10 min** at **42C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.2 kg (84%)	80 %	4
Grain	Pszeniczny	0.8 kg (16%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	22 g	60 min	6.7 %
Boil	Lublin (Lubelski)	30 g	30 min	4.3 %
Boil	Lublin (Lubelski)	20 g	10 min	4.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis S-33	Ale	Dry	11.5 g	Fermentis