

Rozkrętkowa Kolonia

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **26**
- SRM **3.5**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.3 liter(s)**
- Total mash volume **11.1 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **8.3 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.49 kg (90%)	81 %	4
Grain	Pszeniczny	0.28 kg (10%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	9 g	60 min	13.3 %
Boil	Hallertau Spalt Select	7 g	15 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM42 Stare Nadreńskie	Ale	Liquid	1 ml	Fermentum Mobile