

Kolońskie

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **23**
- SRM **3.6**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **3 %**
- Size with trub loss **39.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **47.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **40.5 liter(s)**

Steps

- Temp **45 C**, Time **10 min**
- Temp **53 C**, Time **10 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **31.5 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **10 min** at **53C**
- Keep mash **40 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **24.7 liter(s)** of **76C** water or to achieve **47.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	7.5 kg (83.3%)	81 %	4
Grain	Viking - Pszeniczny	1.5 kg (16.7%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	100 g	50 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
German Ale/Kölsch Yeast	Ale	Dry	11 g	---