

Woda Kolońska

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **26**
- SRM **3.5**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **70 liter(s)**
- Trub loss **5 %**
- Size with trub loss **73.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **88.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **48 liter(s)**
- Total mash volume **64 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **48 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **56.5 liter(s)** of **76C** water or to achieve **88.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód pilzneński	12 kg (75%)	80 %	3.5
Grain	Słód pszeniczny	2 kg (12.5%)	82 %	5
Grain	Słód Carapils	2 kg (12.5%)	80 %	7

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	56 g	60 min	11 %
Boil	Sapphir	140 g	10 min	3.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Kolsch	Ale	Liquid	2800 ml	Wyeast Labs