

Woda Kolonska XX22

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **28**
- SRM **3**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **28.5 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsneński premium	4.5 kg (90%)	81 %	3
Grain	Weyermann pszeniczny jasny	0.5 kg (10%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle DE	30 g	60 min	7.1 %
Boil	Hesbrucker DE	35 g	15 min	4.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1007 German Ale	Ale	Liquid	125 ml	Wyeast