

# Wölff

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **24**
- SRM **5**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **31 liter(s)**

## Steps

- Temp **40 C**, Time **5 min**
- Temp **52 C**, Time **20 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **35 min**

## Mash step by step

- Heat up **24.8 liter(s)** of strike water to **42.5C**
- Add grains
- Keep mash **5 min** at **40C**
- Keep mash **20 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **35 min** at **72C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (80.6%)	80 %	4
Grain	Weyermann - Carapils	1 kg (16.1%)	78 %	4
Grain	Abbey Malt Weyermann	0.2 kg (3.2%)	75 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	30 min	10 %
Aroma (end of boil)	Styrian Wolf	10 g	10 min	13.8 %
Whirlpool	Styrian Wolf	15 g	15 min	13.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	---