

Wölff

- Gravity **12.1 BLG**
- ABV **4.9 %**
- 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 **59 %**
- 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 | --- |