

kolsh first

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **14**
- SRM **3.6**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.3 liter(s)**
- Total mash volume **11 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **73 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **8.3 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **60 min** at **63C**
- Keep mash **20 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	słód pilżeński viking malt	2.5 kg (90.9%)	--- %	3.2
Grain	słód pszniczny jasny viking malt	0.25 kg (9.1%)	--- %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau mittelfruh	15 g	60 min	3 %
Boil	Hallertau mittelfruh	10 g	30 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11 g	Safbrew