

Cool Coolsh

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **22**
- SRM **3.8**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **13.5 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 **72C**
- Keep mash **5 min** at **76C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	3 kg (66.7%)	81 %	4
Grain	Weyermann - Pale Wheat Malt	1 kg (22.2%)	85 %	3.9
Grain	Weyermann - Light Munich Malt	0.5 kg (11.1%)	82 %	17.7

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northern Brewer	15 g	60 min	8.8 %
Boil	Northern Brewer	10 g	30 min	8.8 %
Boil	Huell Melon	10 g	10 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Kolsch	Ale	Liquid	1000 ml	Wyeast Labs