

# kolsh

---

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **20**
- SRM **4.6**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **22.2 liter(s)** of **76C** water or to achieve **34.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Mep Ale	6 kg (100%)	80 %	7

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Aroma (end of boil)	Sybilla	20 g	15 min	3.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Slant	200 ml	Fermentis

## Notes

1. 21l wody o temp. 45°C + śruta
2. Ustalenie pH w granicach 5.4 - 5.5
3. Podgrzanie do 52°C i przerwa 10'
4. Podgrzanie do 64°C i przerwa 45'

5. Podgrzanie do 72°C i przerwa 15'

6. Podgrzanie do 78°C i filtracja.

Wysładzać 16,2 l wody  
*May 2, 2018, 10:18 PM*