

# Kolsh

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **22**
- SRM **3.7**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **11 %/h**
- Boil size **25.5 liter(s)**

## Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.7 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **55 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **13 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **55 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | MEP@Lager           | 3.5 kg (94.6%) | 82 %  | 6   |
| Grain | Strzegom Pszeniczny | 0.2 kg (5.4%)  | 81 %  | 6   |

## Hops

| Use for | Name            | Amount | Time   | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil    | Tradition       | 18 g   | 60 min | 5.5 %      |
| Boil    | Hallertau Blanc | 10 g   | 15 min | 9 %        |
| Boil    | Hallertau Blanc | 10 g   | 10 min | 9 %        |
| Boil    | Hallertau Blanc | 10 g   | 5 min  | 9 %        |

## Yeasts

| Name                             | Type | Form  | Amount | Laboratory |
|----------------------------------|------|-------|--------|------------|
| WLP029 - German Ale/Kölsch Yeast | Ale  | Slant | 100 ml | White Labs |