

# kolsch

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **22**
- SRM **3.4**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.1 liter(s)**
- Total mash volume **17.4 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **13.1 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **63C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Pilzneński           | 3.43 kg (78.9%) | 81 %  | 4   |
| Grain | Pszeniczny           | 0.69 kg (15.8%) | 85 %  | 4   |
| Grain | Bestmalz Carmel Pils | 0.23 kg (5.3%)  | 75 %  | 5   |

## Hops

| Use for | Name        | Amount  | Time   | Alpha acid |
|---------|-------------|---------|--------|------------|
| Boil    | Magnum      | 11.43 g | 60 min | 13.5 %     |
| Boil    | Hersbrucker | 28.57 g | 15 min | 3 %        |

## Yeasts

| Name            | Type | Form   | Amount    | Laboratory  |
|-----------------|------|--------|-----------|-------------|
| Wyeast - Kolsch | Ale  | Liquid | 142.86 ml | Wyeast Labs |