

# Koelsch

- Gravity **11.2 BLG**
- ABV ---
- IBU **23**
- SRM **3.3**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **55 liter(s)**
- Trub loss **2 %**
- Size with trub loss **56.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **64.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **33 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **42.7 liter(s)** of **76C** water or to achieve **64.7 liter(s)** of wort

## Fermentables

| Type    | Name                | Amount        | Yield | EBC |
|---------|---------------------|---------------|-------|-----|
| Grain   | Strzegom Pilzneński | 9 kg (78.9%)  | 80 %  | 4   |
| Grain   | Słód pszeniczny     | 2 kg (17.5%)  | 82 %  | 5   |
| Adjunct | Łuska ryżowa        | 0.4 kg (3.5%) | 1 %   | --- |

## Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Cascade PL | 50 g   | 60 min | 5.2 %      |
| Boil                | Cascade PL | 50 g   | 30 min | 5.2 %      |
| Aroma (end of boil) | Cascade PL | 40 g   | 10 min | 5.2 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale  | Dry  | 22 g   | Fermentis  |