

# Koelsch

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **21**
- SRM **3.9**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński         | 2.7 kg (90%)  | 80 %  | 4   |
| Grain | Weyermann pszeniczny jasny  | 0.2 kg (6.7%) | 80 %  | 6   |
| Grain | Weyermann - Acidulated Malt | 0.1 kg (3.3%) | --- % | --- |

## Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | Hallertauer Magnum | 7 g    | 40 min | 11.7 %     |
| Boil    | Tettnanger         | 20 g   | 15 min | 3.3 %      |

## Yeasts

| Name                  | Type | Form   | Amount | Laboratory |
|-----------------------|------|--------|--------|------------|
| FM42 Stare nadreńskie | Ale  | Liquid | 30 ml  | ---        |

## Extras

| Type  | Name         | Amount | Use for | Time   |
|-------|--------------|--------|---------|--------|
| Other | Łuska ryżowa | 100 g  | Mash    | 10 min |

|        |                |     |      |        |
|--------|----------------|-----|------|--------|
| Fining | Mech Irlandzki | 5 g | Boil | 10 min |
|--------|----------------|-----|------|--------|