

# Koelsch

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **23**
- SRM **3.6**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.4 liter(s)**
- Total mash volume **13.8 liter(s)**

## Steps

- Temp **52 C**, Time **30 min**
- Temp **65 C**, Time **75 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **10.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **30 min** at **52C**
- Keep mash **75 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pilzneński           | 3 kg (87%)     | 81 %  | 4   |
| Grain | Pszeniczny           | 0.19 kg (5.4%) | 85 %  | 4   |
| Grain | Strzegom Wiedeński   | 0.19 kg (5.4%) | 79 %  | 10  |
| Grain | Weyermann - Carapils | 0.08 kg (2.2%) | 78 %  | 4   |

## Hops

| Use for | Name                 | Amount  | Time   | Alpha acid |
|---------|----------------------|---------|--------|------------|
| Boil    | Spalt                | 15 g    | 60 min | 5.5 %      |
| Boil    | Hallertau Mittelfruh | 11.25 g | 45 min | 3 %        |
| Boil    | Spalt                | 15 g    | 15 min | 5.5 %      |

## Yeasts

| Name                 | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale  | Dry  | 16.5 g | Danstar    |