

# Kolsch

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- Gravity **13.1 BLG**
- ABV ---
- IBU **45**
- SRM **4.5**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **19.8 liter(s)**

## Fermentables

| Type  | Name                              | Amount         | Yield  | EBC |
|-------|-----------------------------------|----------------|--------|-----|
| Grain | Weyermann - Bohemian Pilsner Malt | 3 kg (53.1%)   | 81 %   | 4   |
| Grain | Briess - 2 Row Carapils Malt      | 0.5 kg (8.8%)  | 75 %   | 3   |
| Grain | Briess - Pale Ale Malt            | 2 kg (35.4%)   | 80 %   | 7   |
| Grain | Acid Malt                         | 0.15 kg (2.7%) | 58.7 % | 6   |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Junga             | 25 g   | 60 min | 11.1 %     |
| Boil                | Lublin (Lubelski) | 25 g   | 60 min | 4 %        |
| Aroma (end of boil) | Lublin (Lubelski) | 50 g   | 5 min  | 4 %        |

## Yeasts

| Name                 | Type  | Form | Amount | Laboratory     |
|----------------------|-------|------|--------|----------------|
| M54 california lager | Lager | Dry  | 10 g   | Mangrove jacks |