## Kolsch I

- Gravity 12.6 BLG
- ABV **5.1** %
- IBU **24**
- SRM **4.2**
- 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 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 8.3 liter(s)
- Total mash volume 11 liter(s)

## **Steps**

- Temp 45 C, Time 15 min
  Temp 62 C, Time 30 min
  Temp 72 C, Time 20 min
- Temp **78 C**, Time **0 min**

# Mash step by step

- Heat up 8.3 liter(s) of strike water to 49.1C
- Add grains
- Keep mash 15 min at 45C
- Keep mash 30 min at 62C
- Keep mash 20 min at 72C
- Keep mash 0 min at 78C
- Sparge using 8.5 liter(s) of 76C water or to achieve 14 liter(s) of wort

#### **Fermentables**

| Туре  | Name        | Amount                | Yield | EBC |
|-------|-------------|-----------------------|-------|-----|
| Grain | Pilzneński  | 2 kg (72.7%)          | 81 %  | 4   |
| Grain | Pszeniczny  | 0.5 kg <i>(18.2%)</i> | 85 %  | 4   |
| Grain | Monachijski | 0.25 kg <i>(9.1%)</i> | 80 %  | 16  |

## **Hops**

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Magnum            | 6 g    | 60 min | 13.5 %     |
| Boil    | Lublin (Lubelski) | 20 g   | 15 min | 4 %        |