

# Woda Kolońska

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- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **26**
- SRM **3.5**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **70 liter(s)**
- Trub loss **5 %**
- Size with trub loss **73.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **88.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **48 liter(s)**
- Total mash volume **64 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **48 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **56.5 liter(s)** of **76C** water or to achieve **88.5 liter(s)** of wort

## Fermentables

| Type  | Name            | Amount       | Yield | EBC |
|-------|-----------------|--------------|-------|-----|
| Grain | Słód pilzneński | 12 kg (75%)  | 80 %  | 3.5 |
| Grain | Słód pszeniczny | 2 kg (12.5%) | 82 %  | 5   |
| Grain | Słód Carapils   | 2 kg (12.5%) | 80 %  | 7   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | lunga   | 56 g   | 60 min | 11 %       |
| Boil    | Sapphir | 140 g  | 10 min | 3.8 %      |

## Yeasts

| Name            | Type | Form   | Amount  | Laboratory  |
|-----------------|------|--------|---------|-------------|
| Wyeast - Kolsch | Ale  | Liquid | 2800 ml | Wyeast Labs |