

# Witamy w Kolonii

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **27**
- SRM **3.6**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **16.2 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name       | Amount         | Yield | EBC |
|-------|------------|----------------|-------|-----|
| Grain | Pilzneński | 5.1 kg (94.4%) | 81 %  | 4   |
| Grain | Pszeniczny | 0.3 kg (5.6%)  | 85 %  | 4   |

## Hops

| Use for | Name            | Amount | Time   | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil    | Hallertau Blanc | 20 g   | 60 min | 11 %       |
| Boil    | Hallertau Blanc | 20 g   | 5 min  | 11 %       |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| s-33 | Ale  | Dry  | 11 g   | Fermentis  |