

# Kolsch 2.0, pierwsze podejście było dobre więc nic nie zmieniam tylko magnum na goryczke

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **25**
- SRM **4**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **34.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.4 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **20.4 liter(s)**

## Steps

- Temp **65 C**, Time **90 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **74.4C**
- Add grains
- Keep mash **90 min** at **65C**
- Sparge using **26.1 liter(s)** of **76C** water or to achieve **34.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	5 kg (83.3%)	81 %	5
Grain	Weyermann - Pale Wheat Malt	0.5 kg (8.3%)	85 %	5
Grain	Weyermann - Vienna Malt	0.5 kg (8.3%)	81 %	8

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	18 g	60 min	13.5 %
Boil	Hallertau	20 g	15 min	4.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
G03 Dieter	Ale	Slant	200 ml	ImperialYeast