

# Kölsch Złote

- Gravity **12.7 BLG**
- ABV ---
- IBU **37**
- SRM **4.2**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.4 kg (88%)	80 %	4
Grain	Strzegom pszeniczny	0.3 kg (6%)	81 %	6
Grain	Orkiszowy	0.3 kg (6%)	81 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Magnat	20 g	60 min	11.2 %
Boil	Lublin (Lubelski)	30 g	10 min	4 %
Boil	lunga	10 g	30 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM42 Stare Nadreńskie	Ale	Liquid	1000 ml	Fermentum Mobile