

# Kolega

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **25**
- SRM **3.4**
- 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 **7.5 liter(s)**
- Total mash volume **10 liter(s)**

## Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **7.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Bruntal Pilszneński	2 kg (80%)	80 %	4
Grain	Bruntal Pszeniczny	0.5 kg (20%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lubelski	25 g	60 min	3.8 %
Boil	Saaz (Czech Republic)	25 g	10 min	2.85 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Hybride Ale Yeast NOTTY	Ale	Slant	200 ml	gozdawa

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	4 g	Boil	10 min