

# Kolunia

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **25**
- SRM **3.4**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **66.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36 liter(s)**
- Total mash volume **48 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **75 C**, Time **0 min**

## Mash step by step

- Heat up **36 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **75C**
- Sparge using **42.1 liter(s)** of **76C** water or to achieve **66.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	11 kg (91.7%)	80 %	4
Grain	Strzegom Wiedeński	1 kg (8.3%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Smaragd	20 g	60 min	3.9 %
Boil	Comet	50 g	40 min	8.8 %
Boil	Comet	50 g	5 min	8.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM42 Stare Nadreńskie	Ale	Slant	500 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	4 g	Mash	---
Fining	mech irlandzki	5 g	Boil	15 min

## Notes

- fermentacja analogicznie do szwablandzkiego  
*Dec 1, 2017, 6:04 PM*