

# PIWO PIWO KOLSCH

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **34**
- SRM **5.8**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **32.6 liter(s)**

## Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **3.55 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **24.3 liter(s)**

## Steps

- Temp **45 C**, Time **0 min**
- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **19 liter(s)** of strike water to **48.5C**
- Add grains
- Keep mash **0 min** at **45C**
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (74.8%)	81 %	4
Grain	Pszeniczny	0.2 kg (3.7%)	85 %	160
Grain	Strzegom Wiedeński	1 kg (18.7%)	79 %	10
Grain	zakwaszjaacy	0.15 kg (2.8%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	magnum	31 g	60 min	11.5 %
Boil	Tettnang	15 g	15 min	3.3 %
Aroma (end of boil)	Tettnang	20 g	0 min	3.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Kolsch	Ale	Dry	11.5 g	Danstar

## Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Fining	Klarownik 1/2 tab	2 g	Boil	15 min

### Notes

- 1. 21l wody o temp. 45°C + śruta
- 2. Ustalenie pH w granicach 5.4 - 5.5
- 3. Podgrzanie do 52°C i przerwa 10'
- 4. Podgrzanie do 64°C i przerwa 45'
- 5. Podgrzanie do 72°C i przerwa 15'
- 6. Podgrzanie do 78°C i filtracja.  
*Oct 14, 2017, 10:54 PM*
- 6,5 gr cukru na 1l  
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