

# Perła Podkarpacia

- Gravity **12.1 BLG**
- ABV ---
- IBU **28**
- SRM **4.2**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- Size with trub loss **20.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

## Steps

- Temp **45 C**, Time **15 min**
- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **12.9 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **15 min** at **45C**
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.8 kg (88.4%)	80 %	4
Grain	Strzegom pszeniczny	0.5 kg (11.6%)	81 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	35 g	60 min	5 %
Boil	Perle	20 g	15 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11.5 g	Safbrew

## Notes

- W 45st wrzucam zasyp i podgrzewam go w ciągu 15 minut do zamierzonej temperatury 52st.  
*Apr 30, 2016, 9:15 PM*