

# Wiosenne jasne pełne

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **40**
- SRM **4.8**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.35 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **28.1 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **70 C**, Time **5 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **72.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **70C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (95.2%)	80 %	5
Grain	Strzegom Karmel 30	0.25 kg (4.8%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	60 min	12.7 %
Aroma (end of boil)	Saaz (Czech Republic)	25 g	10 min	4.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Fermentis
Kolsh yeast	Ale	Dry	11 g	---