

# Polskie jasne pełne

- Gravity **13.1 BLG**
- ABV ---
- IBU **26**
- SRM **7.2**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **12.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.8 liter(s)**
- Total mash volume **10.4 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **7.8 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **73C**
- Keep mash **15 min** at **78C**
- Sparge using **7.6 liter(s)** of **76C** water or to achieve **12.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (57.7%)	80 %	5
Grain	Strzegom Monachijski typ I	0.5 kg (19.2%)	79 %	16
Grain	Strzegom Karmel 150	0.1 kg (3.8%)	75 %	150
Grain	Słód pszeniczny Bydgoszcz	0.5 kg (19.2%)	82 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	70 min	6.8 %
Boil	Lublin (Lubelski)	7.5 g	20 min	2.8 %
Aroma (end of boil)	Lublin (Lubelski)	7.5 g	1 min	2.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.3 g	---