

# Polskie Ale

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **20**
- SRM **4.4**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **31.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **72 C**, Time **90 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **90 min** at **72C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (81.8%)	80 %	4
Grain	Pszeniczny	0.5 kg (9.1%)	85 %	4
Grain	Strzegom Karmel 30	0.5 kg (9.1%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	90 min	12.7 %
Aroma (end of boil)	Lublin (Lubelski)	25 g	15 min	4.2 %
Aroma (end of boil)	Lublin (Lubelski)	25 g	5 min	4.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Liquid	150 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Fining	WHIRLFLOC	1 g	Boil	15 min