

# Polish Pale Ale

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **31**
- SRM **9.3**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## 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 **15 %/h**
- Boil size **27.6 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **75C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castlemalting - Pale Ale	2.3 kg (38.3%)	80 %	8
Grain	Strzegom Pale Ale Zero	3 kg (50%)	79 %	6
Grain	Special B Castle	0.15 kg (2.5%)	70 %	350
Grain	Castlemalting - Cara Clair	0.4 kg (6.7%)	78 %	4
Grain	Bestmalz - Melanoiden Malt	0.15 kg (2.5%)	80 %	70

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Perle PL (szyszka)	20 g	60 min	7 %
First Wort Hopping				
Aroma (end of boil)	Perle PL (szyszka)	30 g	10 min	7 %
Szyszka				
Aroma (end of boil)	Cascade PL (szyszka)	25 g	10 min	5.2 %
Szyszka				
Aroma (end of boil)	Cascade PL (szyszka)	25 g	5 min	5.2 %

Szyszka				
Dry Hop	Oktawia PL (pelet)	100 g	3 day(s)	7.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wollsæter	Ale	Liquid	25 ml	Priv
Lida	Ale	Liquid	25 ml	Priv

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Whirlfloc	1.25 g	Boil	10 min
Water Agent	Sól Epsom	5 g	Mash	70 min

## Notes

- Chmielenie na zimno, trzymać się temperatur 16-19 st.C  
Cold Crashing 1-4.5 st. C przez 3 dni  
Nagazowanie, celować w 2.0  
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