

# Polish hoppy sour ale

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **31**
- SRM **3.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **7.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	1 kg (40%)	81 %	4
Grain	Słód pszeniczny Bestmalz	1 kg (40%)	82 %	5
Grain	Płatki owsiane	0.5 kg (20%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Exp 2/20	20 g	30 min	11.2 %
Whirlpool	Puławski	20 g	30 min	7.4 %
Dry Hop	Exp 2/20	50 g	5 day(s)	11.2 %
Dry Hop	Puławski	50 g	5 day(s)	7.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lutra OYL-071	Ale	Liquid	15 ml	Omega

## Notes

- Zakwaszana przez 34 godziny w temp. 36 st.  
27.12 dodano uwodnione drożdże Lutra w temp. 11 st.

BLG początkowe - 12.5 BLG  
Chmienie na zimno 4.01.  
Butelkowanie 9.01  
Ekstrakt końcowy 3 BLG.  
A: nafta, białe owoce, agrest, mandarynka  
S: średnia kwaśność.  
*Dec 27, 2022, 10:01 PM*