

# Polski ALE

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **35**
- SRM **4.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **8 %**
- Size with trub loss **24.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **27.5 liter(s)**
- Total mash volume **32.5 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **27.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **31 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (80%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (20%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	50 min	10 %
Boil	Marynka	20 g	30 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	10 min	4 %
Aroma (end of boil)	Spalt	20 g	5 min	5.5 %
Whirlpool	Lublin (Lubelski)	30 g	1 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	---

## Extras

Type	Name	Amount	Use for	Time
Fining	Whirlflock	0.5 g	Boil	5 min

## Notes

- Zlewanie pompą po dłuższym odstaniu.  
*Jun 14, 2023, 5:35 PM*