

## Polski ALE

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- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **49**
- SRM **4.6**

### Batch size

- Expected quantity of finished beer **36 liter(s)**
- Trub loss **8 %**
- Size with trub loss **40 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **46.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **30.4 liter(s)**
- Total mash volume **38.4 liter(s)**

### Steps

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

### Mash step by step

- Heat up **30.4 liter(s)** of strike water to **73.2C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **24.4 liter(s)** of **76C** water or to achieve **46.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	7 kg (87.5%)	80 %	4
Grain	Strzegom Karmel 30	1 kg (12.5%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	lunga	33 g	60 min	11 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	15 min	4 %
Aroma (end of boil)	Sybilla	30 g	10 min	3.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Finning	Mech Irlandzki	10 g	Boil	15 min