

## 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   |
|--------|----------------|--------|---------|--------|
| Fining | Mech Irlandzki | 10 g   | Boil    | 15 min |