

# AleLager

- Gravity **14.3 BLG**
- ABV ---
- IBU **44**
- SRM **7.3**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **18.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.4 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **70 C**, Time **60 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **23.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	2 kg (33.9%)	80 %	16
Grain	Strzegom Pilzneński	2 kg (33.9%)	80 %	4
Grain	Cara-Pils/Dextrine	1 kg (16.9%)	72 %	4
Grain	Strzegom Karmel 30	0.3 kg (5.1%)	75 %	30
Grain	Chit Malt	0.6 kg (10.2%)	50 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	42 g	60 min	6.6 %
Aroma (end of boil)	Premiant	8 g	19 min	6.6 %
Aroma (end of boil)	Saaz (Czech Republic)	15 g	19 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	15 g	5 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	20 g	0 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
CALIFORNIAN LAGER M54 Mangrove Jack's	Lager	Dry	11 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	15 min

## Notes

- Opierdolić mech do wody na godzinke  
*Feb 16, 2017, 8:53 PM*