

# Ale Pils

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **29**
- SRM **5.4**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **73C**
- Keep mash **15 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilzneński (Strzegom)	3 kg (60%)	80 %	4
Grain	Colorado Honig ( Viking Malt)	0.5 kg (10%)	80 %	12
Grain	Słód Wędzony - Jabłoń (Strzegom)	0.5 kg (10%)	81 %	8
Grain	Słód Monachijski typ II (Strzegom)	1 kg (20%)	78 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	40 min	8.8 %
Aroma (end of boil)	Oktawia	15 g	20 min	7.8 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	10 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	kawa amaretto	50 g	Mash	60 min