

# JANUSZ ALE

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **45**
- SRM **8.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **63 C**, Time **40 min**
- Temp **73 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **73C**
- Keep mash **10 min** at **76C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.4 kg (36.9%)	80 %	4
Grain	Viking Pale Ale malt	2.4 kg (36.9%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (15.4%)	79 %	22
Grain	Strzegom Pszeniczny	0.3 kg (4.6%)	81 %	6
Grain	Strzegom Karmel 300	0.2 kg (3.1%)	70 %	299
Grain	zakwaszajacy	0.2 kg (3.1%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10 %
Boil	puławski	30 g	20 min	6 %
Boil	Lublin (Lubelski)	50 g	7 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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M54 Californian Lager	Ale	Dry	11 g	Mangrove Jack's
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### Extras

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