

# IPA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **42**
- SRM **11.5**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.8 liter(s)**
- Total mash volume **34.4 liter(s)**

## Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **25.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale - Strzegom	5 kg (58.1%)	70 %	6
Grain	Monachijski typ II - Strzegom	3.5 kg (40.7%)	70 %	22
Grain	Karmelowy 600 - Strzegom	0.1 kg (1.2%)	68 %	600

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Willamette - USA	20 g	60 min	5.2 %
Boil	Marynka	37 g	60 min	8.8 %
Boil	Willamette - USA	10 g	20 min	5.2 %
Boil	Lublin (Lubelski)	20 g	20 min	3.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	Fermentis