

# milkshake ipa z truskawkami

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **30**
- SRM **5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4.5 kg (66.2%)	80 %	7
Grain	Pszeniczny	1 kg (14.7%)	85 %	4
Grain	Płatki pszeniczne	0.5 kg (7.4%)	85 %	3
Sugar	Milk Sugar (Lactose)	0.8 kg (11.8%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	15 g	50 min	10.5 %
Boil	Citra	20 g	10 min	12 %
Boil	Galaxy	20 g	10 min	15 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-04	Ale	Dry	11.5 g	---