

# STRZAŁ W DUPEŃ ZZA KRZAKA!

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **89**
- SRM **4.5**
- Style **American 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **68 C**, Time **15 min**
- Temp **74 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **15 min** at **68C**
- Keep mash **10 min** at **74C**
- Keep mash **10 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (75.8%)	79 %	6
Grain	Płatki owsiane	0.5 kg (7.6%)	85 %	3
Grain	Pszeniczny	1 kg (15.2%)	82 %	4
Grain	Zakwaszający	0.1 kg (1.5%)	72 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Waimea	40 g	60 min	17.4 %
Aroma (end of boil)	Waimea	40 g	15 min	17.4 %
Whirlpool	Waimea	30 g	0 min	17.4 %
Dry Hop	Waimea	90 g	4 day(s)	17 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	1000 ml	---