

# Urodzinowa IPA

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **46**
- SRM **5.9**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.6 kg (69.7%)	80 %	5
Grain	Strzegom Monachijski typ I	1 kg (15.2%)	79 %	16
Grain	Strzegom Pszeniczny	1 kg (15.2%)	81 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Calypso	15 g	60 min	15.4 %
Boil	Cascade PL	15 g	50 min	5.2 %
Boil	Calypso	20 g	15 min	15.4 %
Boil	Cascade PL	20 g	10 min	5.2 %
Boil	Cascade PL	10 g	5 min	5.2 %
Dry Hop	Amarillo	27 g	7 day(s)	9.5 %
Dry Hop	Citra	38 g	7 day(s)	12 %
Dry Hop	Calypso	30 g	7 day(s)	15.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	11 g	Fermentis
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