

# Christmas IPA

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- Gravity **20.9 BLG**
- ABV ---
- IBU **76**
- SRM **10.2**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **65 C**, Time **90 min**
- Temp **75 C**, Time **5 min**

## Mash step by step

- Heat up **10.7 liter(s)** of strike water to **76.3C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **5 min** at **75C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Fawcett - Golden Promise	4 kg (74.8%)	81 %	4
Grain	Strzegom Monachijski typ I	1.35 kg (25.2%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Waimea (NZ)	30 g	45 min	15.1 %
Boil	Epic (GB)	30 g	15 min	3.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Spice	Skórka z cytryny	100 g	Boil	60 min
Spice	Skórka z pomarańczy	100 g	Boil	60 min

Spice	Cynamon	20 g	Boil	15 min
Spice	Papryka ostra	20 g	Boil	15 min
Spice	Goździki	10 g	Boil	15 min