

# TUR - IMPERIAL RYE ULTRA IPA

- Gravity **24.2 BLG**
- ABV ---
- IBU **277**
- SRM **9.6**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **35 liter(s)**
- Total mash volume **49 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**
- Temp **73 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **35 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **30 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	10 kg (71.4%)	79 %	6
Grain	Karmelowy jasny 30EBC	2 kg (14.3%)	75 %	30
Grain	Weyermann pszeniczny jasny	2 kg (14.3%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Apollo	200 g	60 min	17 %
Boil	Waimea	100 g	60 min	17 %
Boil	Cascade	50 g	10 min	6 %
Boil	Centennial	50 g	10 min	10.5 %
Boil	Lemon drop	50 g	10 min	4.6 %
Dry Hop	Cascade	150 g	30 day(s)	6 %
Dry Hop	Centennial	50 g	30 day(s)	10.5 %
Dry Hop	Lemon drop	150 g	30 day(s)	4.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	20 g	Mangrove Jack's

### Extras

Type	Name	Amount	Use for	Time
Spice	Zest z pomarańczy	200 g	Secondary	30 day(s)
Spice	Zest z grapefruitów	200 g	Secondary	30 day(s)
Spice	Zest z cytryn	200 g	Secondary	30 day(s)
Spice	Zest z limonek	200 g	Secondary	30 day(s)

### Notes

- Chmielimy na zimno co 6 dni rozkładając chmiel równomiernie. Razem z chmielem dodajemy zest z owoców również równomiernie rozłożony. Czas fermentacji cichej można wydłużyć do 60 dni.  
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