

# Trzech Kroli

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **92**
- SRM **5.9**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **17.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **60 min**

## Mash step by step

- Heat up **13.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **60 min** at **72C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **17.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (70%)	81 %	4
Grain	Monachijski	0.5 kg (10%)	80 %	16
Grain	Strzegom Pszeniczny	0.5 kg (10%)	81 %	6
Grain	Carahell	0.1 kg (2%)	77 %	26
Sugar	Candi Sugar, Clear	0.4 kg (8%)	78.3 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	15 g	60 min	13.2 %
Boil	Columbus/Tomahawk/Zeus	15 g	30 min	15.5 %
Boil	Simcoe	15 g	20 min	13.2 %
Boil	Citra	15 g	15 min	12 %
Boil	Centennial	15 g	10 min	10.5 %
Aroma (end of boil)	Ekuanot	15 g	5 min	12.8 %
Aroma (end of boil)	Simcoe	15 g	5 min	13.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	5.75 g	Fermentis
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## Notes

- Ekuanot 25, Galaxy 15, Simcoe 15 do chłodzenia.  
*Jan 25, 2020, 11:19 AM*