

# Cardinalis

- Gravity **16.1 BLG**
- ABV ---
- IBU **69**
- SRM **15.9**
- Style **Red 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 **20 %/h**
- Boil size **30 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25.9 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.5 kg (54%)	79 %	6
Grain	Strzegom Pilzneński	1.2 kg (18.5%)	80 %	4
Grain	Strzegom Monachijski typ I	1.2 kg (18.5%)	79 %	16
Grain	Strzegom karmelowy	0.25 kg (3.9%)	75 %	35
Grain	Biscuit Malt	0.25 kg (3.9%)	79 %	45
Grain	Carafa II	0.08 kg (1.2%)	70 %	812

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	hallertauer taurus	18 g	50 min	14 %
Boil	Simcoe	7.5 g	30 min	13.2 %
Boil	Chinook	7.5 g	30 min	13 %
Boil	Cardinal	15 g	30 min	9.2 %
Aroma (end of boil)	Simcoe	7.5 g	15 min	13.2 %
Aroma (end of boil)	Chinook	7.5 g	15 min	13 %
Aroma (end of boil)	Cardinal	15 g	15 min	9.2 %
Dry Hop	Cardinal	15 g	7 day(s)	9.2 %

Dry Hop	Chinook	15 g	7 day(s)	13 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Notes

- Gotowanie: 70 minut (20 minut bez chmielu - ma to wpłynąć na kolor)

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Fermentacja burzliwa: 7 dni  
Fermentacja cicha: 14 dni

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Butelkowanie: 90g cukru  
*Dec 10, 2016, 3:29 PM*