

# Król Chmielarz I

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **48**
- SRM **7.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.6 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **23.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.4 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **27.8 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **19.6 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **75C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.838 kg (47%)	80 %	4
Grain	Pszeniczny	1.566 kg (19.2%)	85 %	4
Grain	Viking Pale Ale malt	1.018 kg (12.5%)	80 %	5
Grain	Strzegom Monachijski typ II	0.783 kg (9.6%)	79 %	22
Grain	Karmelowy Jasny 30EBC	0.783 kg (9.6%)	75 %	30
Grain	Płatki owsiane	0.175 kg (2.1%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Strata	10 g	30 min	14 %
Boil	Amora Preta	40 g	30 min	11.2 %
Boil	Hallertau Blanc	15 g	30 min	8.4 %
Aroma (end of boil)	Hallertau Blanc	20 g	5 min	8.4 %
Whirlpool	Hallertau Blanc	40 g	0 min	8.4 %
Dodane po ochłodzeniu do 80°C na 45 min				
Dry Hop	Strata	25 g	3 day(s)	14 %

Dry Hop	Talus	35 g	5 day(s)	7.4 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Verdant IPA	Ale	Slant	500 ml	Lallemand

Cała gęstwo pozostawiona w fermentorze z session apa

### Extras

Type	Name	Amount	Use for	Time
Spice	skórka curacao	14 g	Boil	5 min