

# Hops Hops Hops by Krzysztof Kula @piwo.org

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **67**
- SRM **6.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (83.3%)	79 %	6
Grain	Strzegom Monachijski typ I	0.7 kg (11.7%)	79 %	16
Grain	Strzegom Karmel 30	0.3 kg (5%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	35 g	60 min	9.5 %
Boil	Amarillo	25 g	30 min	9.5 %
Boil	Amarillo	30 g	15 min	9.5 %
Aroma (end of boil)	Amarillo	10 g	1 min	9.5 %
Aroma (end of boil)	Cascade	20 g	1 min	6 %
Dry Hop	Cascade	50 g	4 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	Fermentis