

# Columbo

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **45**
- SRM **8.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

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

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (57.1%)	80 %	5
Grain	Honey Malt	0.5 kg (14.3%)	80 %	15
Grain	Strzegom Monachijski typ I	0.5 kg (14.3%)	79 %	16
Grain	Strzegom Karmel 200	0.1 kg (2.9%)	75 %	200
Grain	Płatki owsiane	0.4 kg (11.4%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	marynka	20 g	60 min	8.5 %
Boil	Citra	15 g	10 min	12 %
Boil	Amarillo	10 g	10 min	7.5 %
Dry Hop	Citra	15 g	3 day(s)	12 %
Dry Hop	Amarillo	10 g	3 day(s)	7.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
wyeast 1450	Ale	Liquid	500 ml	wyeast

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	5 g	Boil	60 min
Fining	mech irlandzki	5 g	Boil	10 min