

# Pale ale columbus

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **62**
- SRM **5.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	5.5 kg (96.5%)	80.5 %	6
Grain	Melanoiden Malt	0.2 kg (3.5%)	80 %	39

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Aroma (end of boil)	Simcoe	30 g	10 min	13.2 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	20 g	0 min	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11 g	Safbrew

## Extras

Type	Name	Amount	Use for	Time
Fining	Irish moss	4 g	Boil	15 min