

# Full Aroma Hops

- Gravity **12.1 BLG**
- ABV ---
- IBU **35**
- SRM **4.8**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **24.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.9 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

## Steps

- Temp **61 C**, Time **10 min**
- Temp **71 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **67.8C**
- Add grains
- Keep mash **10 min** at **61C**
- Keep mash **45 min** at **71C**
- Keep mash **10 min** at **76C**
- Sparge using **20.3 liter(s)** of **76C** water or to achieve **30.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (94.3%)	80 %	4
Grain	Strzegom Karmel 30	0.3 kg (5.7%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	9 %
Boil	Lublin (Lubelski)	30 g	30 min	4 %
Whirlpool	Citra	25 g	5 min	12 %
Dry Hop	Citra	25 g	10 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	5 min