

# Listopadowe IPA

- Gravity **14.7 BLG**
- ABV ---
- IBU **69**
- SRM **6.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **45 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **62C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4.5 kg (90%)	85 %	7
Grain	Weyermann pszeniczny jasny	0.5 kg (10%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Amarillo	15 g	30 min	9.5 %
Aroma (end of boil)	Cascade	15 g	5 min	6 %
Dry Hop	Cascade	15 g	3 day(s)	6 %
Aroma (end of boil)	Mosaic	15 g	5 min	10 %
Dry Hop	Mosaic	15 g	3 day(s)	10 %
Aroma (end of boil)	Amarillo	15 g	5 min	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis