

# Żadna LIPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **58**
- SRM **12.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **36 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **73 C**, Time **40 min**

## Mash step by step

- Heat up **27 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **73C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **35.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (55.6%)	80 %	5
Grain	Strzegom Karmel 150	1 kg (11.1%)	75 %	150
Grain	Strzegom Monachijski typ II	2 kg (22.2%)	79 %	22
Grain	Strzegom Pilzneński	1 kg (11.1%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	60 min	14.3 %
Boil	Amarillo	30 g	15 min	8.2 %
Aroma (end of boil)	Amarillo	20 g	0 min	8.2 %
Aroma (end of boil)	Azacca	20 g	0 min	11.8 %
Dry Hop	Azacca	30 g	7 day(s)	11.8 %
Dry Hop	Cashmere	50 g	7 day(s)	6.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM52 Amerykański Sen	Ale	Liquid	40 ml	Fermentum Mobile
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