

# APA z zestawem limonki

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **52**
- SRM **3.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **4 %**
- Size with trub loss **12.5 liter(s)**
- Boil time **75 min**
- Evaporation rate **20 %/h**
- Boil size **16 liter(s)**

## Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.9 liter(s)**
- Total mash volume **11.5 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **8.9 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **16 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1 kg (39.2%)	80 %	5
Grain	Strzegom Pilzneński	1 kg (39.2%)	80 %	4
Grain	Strzegom Pszeniczny	0.5 kg (19.6%)	81 %	6
Grain	Weyermann - Acidulated Malt	0.05 kg (2%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	15 g	35 min	11 %
Boil	Citra	15 g	15 min	12 %
Boil	Chinook	5 g	15 min	12.8 %
Aroma (end of boil)	Citra	20 g	0 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	5 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	2 g	Mash	60 min
Flavor	Zest z limonki	18 g	Secondary	3 day(s)

## Notes

- Zest + sok z 3 limonek  
*Sep 17, 2019, 9:32 PM*