

# Radlerek

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **16**
- SRM **3.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **15.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (53.6%)	79 %	6
Grain	Pilzneński	1 kg (17.9%)	81 %	4
Grain	Płatki pszeniczne	0.6 kg (10.7%)	85 %	3
Sugar	Milk Sugar (Lactose)	0.5 kg (8.9%)	76.1 %	0
Grain	Pszeniczny	0.5 kg (8.9%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	11 %
Boil	Citra	25 g	5 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	22 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	zest + sok z 2 cytryn	2 g	Boil	1 min

Flavor	zest + sok z 2 pomarańczy	2 g	Boil	1 min
Flavor	zest z 2 cytryn	2 g	Secondary	3 day(s)
Flavor	zest z 2 pomarańczy	2 g	Secondary	3 day(s)