

# Ale z czerwoną porzeczką

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **7**
- SRM **8.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (44.4%)	--- %	4.5
Grain	Karmelowy Jasny	2 kg (44.4%)	--- %	30
Grain	Melanoidynowy	0.5 kg (11.1%)	--- %	40

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	25 g	10 min	7.3 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Flavor	Sok z czerwonej porzeczki	3000 g	Boil	70 min

## Notes

- Sok w ilości 3 litrów, wyciśnięty z porzeczek świeżo zerwanych z krzaka.  
*Dec 8, 2017, 2:02 PM*