

# RED IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **54**
- SRM **14.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **35 min**
- Temp **72 C**, Time **35 min**

## Mash step by step

- Heat up **20.4 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **35 min** at **63C**
- Keep mash **35 min** at **72C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter	5 kg (73.5%)	83 %	6
Grain	Monachijski typ I	1 kg (14.7%)	79 %	15
Grain	Żytni	0.5 kg (7.4%)	85 %	8
Grain	Caraaroma	0.25 kg (3.7%)	78 %	400
Grain	Jęczmień palony	0.05 kg (0.7%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	55 min	11 %
Boil	Zula	50 g	12 min	7 %
Boil	Citra	30 g	12 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	1000 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	chlorek wapnia	5 g	Mash	60 min
Water Agent	gips	5 g	Mash	60 min
Fining	mech irlandzki	10 g	Boil	15 min