

# Piekielna IRA

- Gravity **11.1 BLG**
- ABV ---
- IBU **17**
- SRM **15.4**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **16.1 liter(s)**

## Steps

- Temp **63 C**, Time **70 min**

## Mash step by step

- Heat up **12.1 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **70 min** at **63C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	3.5 kg (86.8%)	80 %	6
Grain	Fawcett - Crystal	0.5 kg (12.4%)	70 %	160
Grain	Jęczmień palony	0.03 kg (0.7%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bramling	20 g	60 min	6 %
Aroma (end of boil)	Fuggles	20 g	5 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11.5 g	Danstar

## Extras

Type	Name	Amount	Use for	Time
Spice	Habanero	10 g	Boil	10 min

## Notes

- Wersja testowa.  
*Jun 4, 2015, 1:02 AM*