

# IRA

- Gravity **12.4 BLG**
- ABV ---
- IBU **25**
- SRM **14.9**
- Style **Irish Red Ale**

## 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.6 liter(s)**
- Total mash volume **18.2 liter(s)**

## Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **13.6 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (65.9%)	80 %	4
Grain	Strzegom Wiedeński	1 kg (22%)	79 %	10
Grain	Karmelowy Czerwony	0.25 kg (5.5%)	75 %	59
Grain	Caraaroma	0.25 kg (5.5%)	78 %	400
Grain	Jęczmień palony	0.05 kg (1.1%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	East Kent Goldings	25 g	17 min	5.1 %
Boil	Marynka	25 g	17 min	10 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
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Fining	Mech Irlandzki	10 g	Boil	5 min
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