

## IRA 6/2019

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **19**
- SRM **9.2**
- Style **Irish Red Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **32.6 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.8 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **16.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **21.7 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg (64.2%)	80 %	4
Grain	Strzegom Monachijski typ II	0.5 kg (9.2%)	79 %	22
Grain	Viking Pale Ale	0.5 kg (9.2%)	80 %	6
Grain	cookie-bursztynowy	0.4 kg (7.3%)	70 %	50
Grain	Karmelowy Czerwony	0.5 kg (9.2%)	75 %	50
Grain	Jęczmień palony	0.05 kg (0.9%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook goryczkowy	10 g	60 min	10 %
Boil	Challenger uniwersalny	20 g	20 min	5.8 %
Boil	Challenger uniwersalny	20 g	10 min	5.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	11.5 g	---
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### Extras

Type	Name	Amount	Use for	Time
Other	jęczmień palony	50 g	Mash	10 min

### Notes

- jęczmień palony dodać na 10 min. przed końcem zacierania  
*Mar 19, 2019, 9:30 PM*