

IRA

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **39**
- SRM **10.8**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15.9 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.6 kg (65.2%)	80 %	4
Grain	Strzegom Monachijski typ I	0.9 kg (22.6%)	79 %	16
Grain	Strzegom Karmel 300	0.2 kg (5%)	70 %	299
Grain	Strzegom Karmel 30	0.25 kg (6.3%)	75 %	30
Grain	Jęczmień palony	0.035 kg (0.9%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	13.5 %
Boil	Fuggles	20 g	20 min	4.5 %

Yeasts

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