

# IRA - Komercja (trochę nie wyszło)

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **37**
- SRM **19.6**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.5 liter(s)**

## Steps

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

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **75.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (70.5%)	80 %	6
Grain	Strzegom Red Ale	0.5 kg (8.8%)	80 %	70
Grain	Strzegom Monachijski typ I	1 kg (17.6%)	80 %	16
Grain	Jęczmień palony	0.17 kg (3%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	30 g	55 min	6.7 %
Boil	Lublin (Lubelski)	30 g	20 min	4.6 %
Boil	Sybilla	20 g	5 min	6.7 %
Boil	Lublin (Lubelski)	20 g	5 min	4.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	1000 ml	Fermentum Mobile