

## Isb

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **23**
- SRM **9.7**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **53 liter(s)**
- Trub loss **5 %**
- Size with trub loss **55.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **67.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **37.5 liter(s)**
- Total mash volume **50 liter(s)**

### Steps

- Temp **65 C**, Time **40 min**
- Temp **73 C**, Time **20 min**

### Mash step by step

- Heat up **37.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **73C**
- Sparge using **42.1 liter(s)** of **76C** water or to achieve **67.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	11 kg (84.6%)	81 %	6
Grain	Strzegom Monachijski typ I	0.2 kg (1.5%)	79 %	16
Grain	Cara-Pils/Dextrine	0.65 kg (5%)	72 %	4
Grain	Special B Malt	0.65 kg (5%)	65.2 %	315
Sugar	Dememera Sugar	0.5 kg (3.8%)	100 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	8 %
Boil	Marynka	20 g	20 min	8 %
Boil	Tradition	30 g	20 min	6 %
Boil	Tradition	30 g	5 min	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP004 - Irish Ale Yeast	Ale	Liquid	150 ml	White Labs

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Gops	5 g	Mash	60 min
Water Agent	Kwas mlekowy	4 g	Mash	5 min