

# RIS

- Gravity **29.2 BLG**
- ABV ---
- IBU **60**
- SRM **40**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20 liter(s)**
- Boil time **180 min**
- Evaporation rate **10 %/h**
- Boil size **29.8 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **35.1 liter(s)**
- Total mash volume **46.8 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **35.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **6.4 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	BestMälz Pale Ale	5 kg	81.8 %	15
Grain	Fawcett Munich	3.5 kg	79 %	68
Grain	Fawcett Roasted Barley (palony jęczmień)	0.6 kg	68.5 %	3868
Grain	Caraaroma (Weyermann)	0.5 kg	73.58 %	934
Grain	Caramunich II (Weyermann)	0.5 kg	75.74 %	330
Grain	Carafa Special I (Weyermann)	0.4 kg	77.9 %	1681
Grain	Castle Malting Chit Barley Malt Flakes (płatki jęczmienne)	0.4 kg	70 %	12
Grain	Castle Malting Chit Wheat Malt Flakes (płatki pszeniczne)	0.4 kg	70 %	12
Grain	Płatki owsiane	0.4 kg	80 %	1

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	80 g	60 min	10.5 %
Boil	Lublin (Lubelski)	60 g	10 min	4 %

## Yeasts

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