

# Wędzony RIS z gruszką

- Gravity **22.5 BLG**
- ABV **10.2 %**
- IBU **66**
- SRM **73.4**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **14.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **17.3 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **78C**
- Sparge using **5.3 liter(s)** of **76C** water or to achieve **17.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzński	3 kg (37.5%)	81 %	4
Grain	Grodziski pszeniczny wędzony dębem	1.6 kg (20%)	80 %	3
Grain	Wędzony bukiem Weyermann	1.2 kg (15%)	82 %	6
Grain	Castle Malting Whisky Nature	0.2 kg (2.5%)	85 %	4
Grain	Fawcett - Chocolate	0.4 kg (5%)	71 %	1150
Grain	Weyermann - Chocolate Rye	0.6 kg (7.5%)	20 %	650
Grain	Caraaroma	0.8 kg (10%)	78 %	400
Grain	Jęczmień palony	0.2 kg (2.5%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	46.67 g	70 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Danny's Favourite	Ale	Slant	333.33 ml	Wyeast
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### Extras

Type	Name	Amount	Use for	Time
Flavor	Gruszka wędzona	666.67 g	Secondary	21 day(s)