

# RIS urodzinowy

- Gravity **24 BLG**
- ABV **11 %**
- IBU **47**
- SRM **62.3**
- Style **Russian Imperial Stout**

## 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 **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **26.9 liter(s)**
- Total mash volume **34.6 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (42.6%)	80 %	5
Grain	Strzegom Karmel 150	1 kg (10.6%)	75 %	150
Grain	Strzegom Monachijski typ I	1 kg (10.6%)	79 %	16
Grain	Carafa III	0.25 kg (2.7%)	70 %	1300
Grain	Viking melanoidynowy	1 kg (10.6%)	75 %	60
Grain	Jęczmień palony	0.05 kg (0.5%)	55 %	1100
Liquid Extract	ekstrakt słodowy ciemny Bruntal	1.7 kg (18.1%)	90 %	621
Grain	Płatki owsiane	0.4 kg (4.3%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Boil	Lublin (Lubelski)	30 g	30 min	4 %
Boil	lunga	30 g	30 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	22 g	Safale