

## święteczne???

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **38**
- SRM **22.1**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **19.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.1 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (62.5%)	81 %	4
Grain	Monachijski	1 kg (20.8%)	80 %	16
Grain	Płatki owsiane	0.4 kg (8.3%)	85 %	3
Grain	Strzegom Karmel 600	0.1 kg (2.1%)	68 %	601
Sugar	Cane (Beet) Sugar	0.1 kg (2.1%)	100 %	0
Grain	Carafa II	0.1 kg (2.1%)	70 %	812
Grain	Carafa III	0.1 kg (2.1%)	70 %	1034

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	20 g	60 min	15 %

### Yeasts

Name	Type	Form	Amount	Laboratory
hot head	Ale	Slant	500 ml	Omega

### Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon	5 g	Boil	10 min
Spice	Ekstrakt waniliowy	10 g	Boil	10 min
Spice	Skórka pomarańczy	20 g	Boil	10 min
Spice	Gozdziki	5 g	Boil	10 min
Spice	Śliwki suszone	200 g	Boil	10 min
Spice	Kardamon	5 g	Boil	10 min