

## #19

- Gravity **19.1 BLG**
- ABV **8.3 %**
- IBU **21**
- SRM **30.6**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **29.6 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (44.4%)	80 %	5
Grain	Strzegom Monachijski typ II	3 kg (33.3%)	79 %	22
Grain	Strzegom Karmel 300	0.5 kg (5.6%)	70 %	299
Grain	Jęczmień palony	0.25 kg (2.8%)	1 %	985
Grain	Czekoladowy	0.25 kg (2.8%)	1 %	788
Sugar	laktoza	1 kg (11.1%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	14 g	60 min	12 %
Boil	Puławski	10 g	30 min	8.9 %
Boil	Puławski	20 g	7 min	8.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Safale

### Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	1000 g	Boil	15 min
Spice	goździki	30 g	Secondary	7 day(s)
Flavor	śliwka wędzona	1000 g	Secondary	7 day(s)