

# Podstawa do świątecznego

- Gravity **20.9 BLG**
- ABV **9.3 %**
- IBU **30**
- SRM **18.6**
- Style **Traditional Bock**

## Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **47.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **57 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **1.5 liter(s) / kg**
- Mash size **27.8 liter(s)**
- Total mash volume **46.3 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	4 kg (21.6%)	79 %	16
Grain	Viking Pale Ale malt	4 kg (21.6%)	80 %	5
Grain	Strzegom Wiedeński	4 kg (21.6%)	79 %	10
Grain	Strzegom Monachijski typ II	2 kg (10.8%)	79 %	22
Grain	Viking melanoidynowy	1.5 kg (8.1%)	75 %	60
Grain	Biscuit Malt	1.5 kg (8.1%)	79 %	45
Grain	Strzegom Karmel 150	1 kg (5.4%)	75 %	150
Grain	Weyermann Specjal W	0.5 kg (2.7%)	68 %	300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Summit	30 g	60 min	18 %
Boil	Lublin (Lubelski)	30 g	5 min	4.1 %
Boil	Oktawia	30 g	60 min	9.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
saflager s-189	Lager	Slant	200 ml	---

## Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon kora	5 g	Boil	15 min
Spice	Anyż	3 g	Boil	15 min

Spice	Goździki	5 g	Boil	15 min
Fining	Whirlflock T	2 g	Boil	15 min