

# Świąteczne I

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **20**
- SRM **31.4**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.6 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **26.9 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg (46.9%)	80 %	4
Grain	Strzegom Pszeniczny	2.3 kg (30.8%)	81 %	6
Grain	Karmelowy Jasny 30EBC	0.5 kg (6.7%)	75 %	30
Grain	Strzegom Karmel 600	0.15 kg (2%)	68 %	601
Grain	Jęczmień palony	0.12 kg (1.6%)	55 %	985
Grain	Strzegom Barwiący	0.3 kg (4%)	68 %	1300
Grain	Płatki owsiane	0.6 kg (8%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	21 g	55 min	10 %
Boil	Lublin (Lubelski)	10 g	15 min	6.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	zest z pomarańczy	15 g	Boil	5 min
Spice	cynamon laska 2 szt	7 g	Boil	5 min
Spice	anyż 4 gwiazdki	15 g	Boil	5 min
Spice	kardamom 10 ziaren	15 g	Boil	5 min