

# Kopiernik

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **32**
- SRM **22.4**
- Style **Christmas/Winter Specialty Spiced Beer**

## 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 **76 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **27.6 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (48.9%)	80 %	5
Grain	Pszeniczny	1 kg (16.3%)	85 %	4
Grain	Strzegom Monachijski typ II	0.7 kg (11.4%)	79 %	22
Grain	Słód Caramunich Typ II Weyermann	0.7 kg (11.4%)	73 %	120
Grain	płatki jęczmienne	0.5 kg (8.2%)	85 %	---
Grain	Strzegom Czekoladowy 1200	0.13 kg (2.1%)	68 %	1202
Grain	Jęczmień palony	0.1 kg (1.6%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	East Kent Goldings	15 g	10 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon	6 g	Boil	15 min
Spice	Gałka Muszkatołowa	7 g	Boil	15 min
Spice	Goździki	12 g	Boil	15 min
Flavor	Skórka z 3 pomarańczy	60 g	Boil	15 min
Flavor	Śliwki suszone	180 g	Boil	15 min

Spice	Imbir	6 g	Boil	15 min
Spice	Kardamon	9 g	Boil	15 min
Flavor	Śliwki suszone	130 g	Secondary	7 day(s)

## Notes

- 15.10.2016 - 10 warka X-Mas Ale  
31.10.2016 - zlanie na cichą  
06.11.2016 - butelkowanie  
*Jan 13, 2018, 8:28 PM*