

## xmas

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **44**
- SRM **27.3**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.6 liter(s)**
- Total mash volume **23.4 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg (59.8%)	80 %	4
Grain	Pszeniczny	1 kg (17.1%)	85 %	4
Grain	cookie	0.4 kg (6.8%)	70 %	50
Grain	Caraaroma	0.2 kg (3.4%)	78 %	400
Grain	Carafa III	0.25 kg (4.3%)	70 %	1034
Grain	Strzegom Monachijski typ II	0.2 kg (3.4%)	79 %	22
Grain	Strzegom Czekoladowy jasny	0.3 kg (5.1%)	68 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	7.5 %
Boil	Marynka	15 g	30 min	7.5 %
Boil	Marynka	15 g	5 min	7.5 %
Boil	Cascade	15 g	30 min	6.5 %
Boil	Cascade	15 g	5 min	6.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
t-58	Ale	Dry	11.5 g	---

### Extras

Type	Name	Amount	Use for	Time
Spice	Cardamom, Green	5 g	Boil	15 min
Spice	goździk	5 g	Boil	15 min
Spice	skórki pomarańczy	30 g	Boil	60 min

Spice	śliwka suszona	300 g	Boil	30 min
Spice	cynamon	15 g	Boil	50 min
Spice	wanilia	2 g	Boil	50 min

## Notes

- Gęstość przed zadaniem drożdży 16 BLG.  
*Nov 25, 2017, 1:56 PM*