

xmas ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **5.7**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **9.4 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.28 kg (54.2%)	81 %	4
Grain	Monachijski	0.7 kg (29.7%)	80 %	16
Grain	Karmelowy Jasny 30EBC	0.18 kg (7.6%)	75 %	30
Grain	Płatki owsiane	0.2 kg (8.5%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %

Extras

Type	Name	Amount	Use for	Time
Spice	Goździki	1.5 g	Boil	5 min
Spice	cynamon	3 g	Boil	5 min
Spice	Ziele Ang	1.5 g	Boil	5 min
Spice	Gałka	2 g	Boil	5 min
Flavor	Imbir	2 g	Boil	5 min
Flavor	skórki pomarańczy	20 g	Boil	5 min