

# Christmas Dry Stout

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **15**
- SRM **28.5**
- 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 **25.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **32.4 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Sugar	Milk Sugar (Lactose)	0.5 kg (5.7%)	76.1 %	0
Grain	Viking Pale Ale malt	4 kg (45.5%)	40 %	5
Grain	Viking Golden Ale malt 8 EBC	3 kg (34.1%)	40 %	8
Grain	Viking Caramel 30 malt 30 EBC	0.5 kg (5.7%)	34 %	30
Grain	Viking Czekoladowy jasny 400 E	0.3 kg (3.4%)	20 %	400
Grain	Viking Czekoladowy ciemny 1200 EBC	0.3 kg (3.4%)	20 %	1200
Sugar	Cukier trzcinowy	0.2 kg (2.3%)	100 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	13.5 %
Dry Hop	Kent Goldings	25 g	7 day(s)	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11 g	Danstar

## Extras

Type	Name	Amount	Use for	Time
Spice	Wanilia	10 g	Secondary	7 day(s)
Flavor	Kawa Lavazza w ziarnach, prażona	100 g	Secondary	5 day(s)
Spice	Goździki	5 g	Boil	15 min
Fining	Mech irlandzki	10 g	Boil	15 min

Spice	Kardamon	5 g	Boil	15 min
Spice	Imbir �wierzny, grubo krojony	30 g	Boil	15 min
Flavor	Suszone sk�rki s�odkiej pomara�czy	20 g	Boil	20 min
Spice	Cynamon (t�uczona kora - nie mielona)	15 g	Boil	15 min
Spice	Ga�ka muszkata�owa tarta	8 g	Boil	15 min
Flavor	Herbata czarna	15 g	Boil	15 min

## Notes

- Brzeczka z wys odzin (cienkusz) po mocnym ciemnym piwie RIS.  
Dodatki do wyboru (raczej kilka - nie wszystkie na raz :-)  
*Sep 26, 2018, 11:15 PM*