

Stout Czekoladowy

- Gravity **20.9 BLG**
- ABV ---
- IBU **22**
- SRM **66**
- Style **Foreign Extra Stout**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.2 liter(s)**
- Total mash volume **32.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **24.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5.25 kg (65.2%)	80 %	4
Grain	Monachijski	0.6 kg (7.5%)	80 %	16
Grain	Pszeniczny	0.3 kg (3.7%)	85 %	4
Grain	Grodziski pszeniczny wędzony dębem	0.3 kg (3.7%)	80 %	3
Grain	Briess - 2 Row Carapils Malt	0.3 kg (3.7%)	75 %	3
Grain	Strzegom Karmel 150	0.15 kg (1.9%)	75 %	150
Grain	Caraaroma	0.15 kg (1.9%)	78 %	400
Grain	Jęczmień palony	0.25 kg (3.1%)	55 %	985
Grain	Fawcett - Pszeniczny Czekoladowy	0.4 kg (5%)	73 %	1001
Grain	Czekoladowy	0.35 kg (4.3%)	60 %	788

Hops

Use for	Name	Amount	Time	Alpha acid
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Boil	Galaxy	5 g	60 min	15 %
Aroma (end of boil)	Lublin (Lubelski)	45 g	50 min	4 %