COCOA RIS

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **92**
- SRM **50.3**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **150 min**
- Evaporation rate **10 %/h**
- Boil size **28.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **29.4 liter(s)**

Steps

- Temp **66 C**, Time **90 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **20.2 liter(s)** of strike water to **76.5C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Colorado Pale Base Malt - Viking Malt	5 kg *(54.3%)*	80 %	5
Grain	Słód monachijski typ I 12-17 EBC Weyermann®	2 kg *(21.7%)*	79 %	16
Grain	Weyermann Caramunich 3	0.4 kg *(4.3%)*	76 %	150
Grain	Caraaroma	0.5 kg *(5.4%)*	78 %	400
Grain	Płatki żytnie	0.3 kg *(3.3%)*	80 %	4
Grain	Słód orkiszowy, czekoladowy 450-1000 EBC Weyermann	0.4 kg *(4.3%)*	80 %	600
Grain	Palone ziarna jęczmienia 1100-1200 EBC Weyermann	0.6 kg *(6.5%)*	55 %	1100
na 40min				

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	60 min	16.5 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Boil	Summit	30 g	60 min	14.3 %
Boil	zeus	30 g	55 min	15 %
Boil	Sorachi Ace	30 g	45 min	9.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	400 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	kakao macerowane w whisky	30 g	Secondary	5 day(s)