

USA nad Bałtykiem

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **19**
- SRM **18.6**
- Style **American Brown Ale**

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 **8 %/h**
- Boil size **12.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **6.9 liter(s)** of strike water to **60.9C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **12.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Vienna Malt	0.6 kg (26%)	79 %	9
Grain	Viking Munich Malt I	0.6 kg (26%)	78 %	14
Grain	Viking Munich Malt II	0.6 kg (26%)	78 %	20
Grain	Strzegom Karmel 150	0.2 kg (8.7%)	75 %	150
Grain	Strzegom Czekoladowy jasny	0.07 kg (3%)	68 %	400
Grain	Strzegom Barwiący	0.04 kg (1.7%)	68 %	1450
Grain	płatki owsiane błyskawiczne	0.2 kg (8.7%)	--- %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic 10,4%AA	5 g	60 min	10.4 %
Aroma (end of boil)	Mosaic 10,4%AA	5 g	10 min	10.4 %
Boil	Cascade 6,9%AA	5 g	10 min	6.9 %
Aroma (end of boil)	Cascade 6,9%AA	5 g	0 min	6.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
S-04	Ale	Slant	30 ml	---