

Down Under

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **64**
- SRM **7.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **65 C**, Time **60 min**
- Temp **70 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **57.5C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **70C**
- Keep mash **1 min** at **78C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (66.7%)	80 %	5
Grain	Strzegom Wiedeński	2 kg (26.7%)	79 %	10
Grain	Karmelowy Pszeniczny Strzegom	0.2 kg (2.7%)	79 %	130
Grain	Pszeniczny	0.3 kg (4%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Green Bullet	20 g	90 min	11 %
Boil	Green Bullet	10 g	60 min	11 %
Boil	Vic Secret	15 g	60 min	16.3 %
Aroma (end of boil)	Green Bullet	30 g	5 min	11 %
Aroma (end of boil)	Southern Cross	30 g	5 min	13.5 %
Soft bitterness, lemon zest and pine needles Bittering & Aroma				
Dry Hop	Pacifica (NZ)	60 g	14 day(s)	4.8 %
Dry Hop	Vic Secret	15 g	7 day(s)	16.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis