

ARES Słodko-Gorzkie Milkshake !PA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **52**
- SRM **16.2**
- Style **English IPA**

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 **5 %/h**
- Boil size **23.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **25.5 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **75 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **20.4 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **45 min** at **75C**
- Keep mash **10 min** at **78C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	ARES Słodko-Gorzkie Milkshake !PA	5.1 kg (87.9%)	80 %	40
Adjunct	Płatki Błyskawiczne	0.2 kg (3.4%)	1 %	20
Adjunct	Laktoza	0.5 kg (8.6%)	1 %	20

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	25 g	60 min	15.5 %
Boil	Lublin (Lubelski)	50 g	10 min	4 %
Aroma (end of boil)	Kent Goldings	25 g	5 min	5.5 %
Dry Hop	Columbus/Tomahawk/Zeus	25 g	2 day(s)	15.5 %
Dry Hop	Chinook	25 g	2 day(s)	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
NEW WORLD STRONG ALE M42 Mangrove Jack's	Ale	Dry	10 g	---

Extras

Type	Name	Amount	Use for	Time
Fining	Whirflock	5 g	Boil	5 min