

LEM| Low Alco Milkshake APA

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **30**
- SRM **3.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.8 liter(s)**
- Boil time **65 min**
- Evaporation rate **15 %/h**
- Boil size **32 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **8 liter(s) / kg**
- Mash size **28 liter(s)**
- Total mash volume **31.5 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **28 liter(s)** of strike water to **66.8C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **7.5 liter(s)** of **76C** water or to achieve **32 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Viking Malt Pilsneński | 2 kg (50%) | 82 % | 4 |
| Grain | Viking Malt Pszeniczny | 0.5 kg (12.5%) | 85 % | 4 |
| Grain | Abbey Malt Weyermann | 0.25 kg (6.3%) | 75 % | 45 |
| Grain | Weyermann - Carapils | 0.25 kg (6.3%) | 78 % | 4 |
| Grain | Płatki owsiane | 0.5 kg (12.5%) | 85 % | 3 |
| Sugar | Laktoza | 0.5 kg (12.5%) | 65 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Mandarina Bavaria | 25 g | 65 min | 8.6 % |
| Boil | Huell Melon | 25 g | 10 min | 6.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 23 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|---------|--------|
| Flavor | Laktoza | 0.5 g | Boil | 15 min |