# **BLACK SWAN LAGER**

# INTERNATIONAL LAGER – INTERNATIONAL PALE LAGER

# **OVERVIEW**

A full bodied Australian draught. Moderate malt character, medium bitterness and lingering malt notes with a clean lager finish.

# **BATCH STATISTICS**

MASH WATER:	15.98 LITRES
SPARGE WATER:	14.23 LITRES
PRE BOIL VOLUME:	28 LITRES
BOIL TIME:	60 MINUTES
FINAL VOLUME:	23 LITRES
ORIGINAL GRAVITY:	1.043
FINAL GRAVITY:	1.008
ASSUMED EFFICIENCY:	75%
ABV:	4.59%
BITTERNESS:	19.7 IBU
COLOUR:	4 EBC

# **FERMENTABLES**

JOE WHITE MALTINGS – PALE MALT, TRADITIONAL ALE – 4 KG WEYERMANN – CARAPILS/CARAFOAM – 0.16 KG

#### MASH PROFILE

TEMP	65°C FOR 60 MINUTES
MASH OUT	75°C FOR 10 MINUTES

# HOPS

BOIL – PRIDE OF RINGWOOD – 16g – 10.5% AA – 60 MINS – 19.7 IBU
BOIL - WHIRLFLOC - 1 ITEMS - 15 MINS
BOIL - PRIDE OF RINGWOOD - 15a - 9% AA - 0 MINS - 0 IBU

# **YEAST**

FERMENTIS S-23 - SAFLAGER WEST EUROPEAN LAGER (2 PKG attenuation: 82%

FERMENTATION TEMP RANGE: 12°C - 15°C

\*USE OUR SUBSTITUTE CHART FOR AN ALTERNATIVE

# FERMENTATION PROFILE

°C FOR 5 days
i°C FOR 5 days
0°C FOR 2 days

# **WATER CHEMISTRY**

MASH – CALCIUM CHLORIDE (CACL2) – 1.72 G
MASH – EPSOM SALT (MGSO4) – 1.1 G
MASH - GYPSUM (CASO4) - 1.31 G
MASH – PHOSPHORIC ACID – 2 ML
SPARGE – CALCIUM CHLORIDE (CACL2) – 1.57 G
SPARGE – EPSOM SALT (MGSO4) – 1.01 G
SPARGE – GYPSUM (CASO4) – 1.2 G

\*ONLY USE WATER CHEMISTRY ADDITIONS IF USING RO WATER

#### **NOTES**

THIS RECIPE TAKES INSPIRATION FROM SWAN DRAUGHT AND PRODUCES AN AUSTRALIAN DRAUGHT WITH SIMILAR CHARACTERISTICS – BUT IS NOT INTENDED TO BE A DIRECT CLONE.

FERMENT COOL FOR A CLEAN, CRISP LAGER FINISH. EXTENDED CONDITIONING, FILTERING OR FINING AGENTS CAN BE USED TO GET THIS BEER ULTRA CLEAR. IF YOU DON'T HAVE TEMPERATURE CONTROL WE WOULD RECOMMEND FERMENTING WITH KVEIK LUTRA. LUTRA CAN BE FERMENTED BETWEEN 20°C AND 40°C AND STILL PRODUCE ULTRA CLEAN, CRISP LAGER STYLES.