



SNOWPEAK BRAND

天銀化工(私人)有限公司 TIEN YUAN CHEMICAL (PTE) LTD.

NO. 18 CHIN BEE ROAD, JURONG TOWN, SINGAPORE 619827

Manufacturer of:-
Eugenol,
Menthol Crystal
& Other Essential Oil

CERTIFICATE OF ANALYSIS

DATE: 10 September 2015

INVOCIE NO. : TYC152-305
VESSEL NAME : MATHILDE MAERSK V.534E
FROM : SINGAPORE PORT
80 CARTONS X 25KGS = 2,000KGS
SYNTHETIC CAMPHOR POWDER BP
AS PER OFFER NO. 151019TY DATED 09.08.2015

ETD : 14 September 2015
TO : BUSAN KOREA
Lot No. : 3410788
MFG : 20.10.2014
BBD : 20.10.2017

WE HEREBY CERTIFY THAT THE ANALYSIS RESULTS ARE AS FOLLOWS:-

A) GENERAL DESCRIPTION

APPEARANCE : A WHITE, CRYSTALLINE POWDER OR FRIABLE, CRYSTALLINE
MASSES, HIGHLY VOLATILE EVEN AT ROOM TEMPERATURE.
ODOR : CHARACTERISTIC PENETRATING ODOR AND A TASTE WHICH
IS PUNGENT.

B) ANALYTICAL DATA

MELTING POINT : 173.4°C
OPTICAL ROTATION : 0.1°
NON-VOLATILE MATTER : 0.01%

RESULT

SPECIFICATION (EP/BP2014)

HALOGENS : COMPLIED
WATER : COMPLIED
RELATED SUBSTANCES : COMPLIED

172°C TO 180°C
-0.15' TO +0.15'
THE RESIDUE WEIGHS NOT MORE THAN
1 mg (0.05%)
COMPLIES WITH LIMIT TEST FOR CHLORIDE.
NOT MORE THAN 100PPM
DISSOLVE 1GM IN 10ML OF LIGHT PETROLEUM R.
THE SOLUTION IS CLEAR
THE RESOLUTION BETWEEN THE PEAKS
CORRESPONDING TO CAMPHOR AND BORNYL
ACETATE IS NOT LESS THAN 1.5 AND THE
PRINCIPAL PEAK IN THE CHROMATOGRAM
OBTAINED WITH 0.0005% W/V SOLUTION HAS A
SIGNAL-TO-NOISE RATIO OF AT LEAST 5
96% AND ABOVE BASED ON THE RELATED SUBSTANCES

PURITY (GC) : 96.60%

C) HEAVY METAL

Lead (powder using material of clay)
Lead (Others)
Arsenic
Mercury
Antimony
Cadmium

RESULT

COMPLIED
COMPLIED
COMPLIED
COMPLIED
COMPLIED
COMPLIED

SPECIFICATION (KFDA COSMETICS ACT)

<50ug/g
<20ug/g
<10ug/g
<1ug/g
<10ug/g
<5ug/g

D) RESIDUAL SOLVENT

Dioxane
Menthanol
Formaldehyde
Phthalate & its substituted compounds

COMPLIED
COMPLIED
COMPLIED
COMPLIED

<100ug/g
<0.2(v/v)%
<2,000ug/g
Total <100ug/g

E) MICROBIAL CONTAMINATION LIMIT

Total aerobic viable cell counts
(Infant & child prouducts, eye
makeup products)
(Others)
Escherichia Coli
Pseudomonas aeruginosa
Staphylococcus aureus

COMPLIED
COMPLIED
COMPLIED
COMPLIED
COMPLIED

<500ea/g(mL)
<1,000ea/g(mL)
non-detecton
non-detecton
non-detecton

YOURS FAITHFULLY,
TIEN YUAN CHEMICAL (PTE) LTD

.....
CHEMIST

WONPOONG PHARM CO., LTD.
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K. H. YUN / PRESIDENT