

PRODUCT SPECIFICATION

| | | | |
|----------------------------|------------------------------|-----------------------|--------------|
| INCI/Botanical Name | <i>PINUS MARITIMA</i> | Product Name | Pine Extract |
| Parts of Plant | Bark | Report No | PP/HP/23 |
| Extraction Ratio | Liquid Extract | Origin | India |
| Extraction Base | Water/Solvent | Date of Expiry | 02 Years |
| Cas No | 133248-87-0 | HSN Code | 13021919 |

| TEST | SPECIFICATION | METHOD |
|------|---------------|--------|
|------|---------------|--------|

A. Physical Parameters:

| <u>Solvent Used</u> | PG BASE | GLYCERIN | DISTILLED | |
|---|---------------------------|----------------------------|---------------------------|--------------|
| Appearance | Liquid | Liquid | Clear liquid | Visual |
| Color | Yellowish | Brownish | Colorless | Visual |
| Odour | Characteristic | Characteristic | Characteristic | Organoleptic |
| Taste | Characteristic | Characteristic | Characteristic | Organoleptic |
| Miscibility | | | | |
| Water | Miscible | Miscible | Miscible | USP 516 |
| Propylene | Miscible | Miscible | Miscible | USP 516 |
| Alcohol (50% Alcohol) | Miscible | Miscible | Miscible | USP 516 |
| pH (1% Aqu. Solⁿ.) | Between 4.0 to 7.0 | Between 4.0 to 7.0 | Between 4.0 to 7.0 | USP 791 |
| Specific Gravity (At20^oC) | Between 1.00 to 1.1 gm/ml | Between 1.16 to 1.23 gm/ml | Between 1.00 to 1.1 gm/ml | Pycnometer |

B. Active Ingredients:

| | | | | |
|----------------|----------------|----------------|-----|------------|
| Tannins | Present | Present | --- | USP |
|----------------|----------------|----------------|-----|------------|

C. Heavy Metals:

| | | | | |
|---------------------|-------------|-------------|-------------|---------|
| Lead (PB) | NMT 1.0 ppm | NMT 1.0 ppm | NMT 1.0 ppm | USP 233 |
| Mercury (HG) | NMT 1.0 ppm | NMT 1.0 ppm | NMT 1.0 ppm | USP 233 |
| Arsenic (AS) | NMT 1.0 ppm | NMT 1.0 ppm | NMT 1.0 ppm | USP 233 |
| Cadmium (CD) | NMT 1.0 ppm | NMT 1.0 ppm | NMT 1.0 ppm | USP 233 |

D. Microbiological Test:

| | | | | |
|-------------------------------------|-----------------|-----------------|-----------------|----------|
| Total Aerobic Count | NMT 1000 cfu/gm | NMT 1000 cfu/gm | NMT 1000 cfu/gm | USP 2021 |
| Total Yeast & Mold Count | NMT 100 cfu/gm | NMT 100 cfu/gm | NMT 100 cfu/gm | USP 2021 |
| Escherichia coli | Absent | Absent | Absent | USP 2022 |
| Salmonella | Absent | Absent | Absent | USP 2022 |
| S. aureus | Absent | Absent | Absent | USP 2022 |
| Staphylococcus | Absent | Absent | Absent | USP 2022 |

E. Other:

Standard Packing: 25 Kg in single HDPE Container.

The above material complies with in-house specifications.

Store in a cool and dry place away from sunlight and heat. The preferred storage is below 30^oC.

The Product Is of Herbal Origin. There May Be Minor Color Difference Due to Geographical and Seasonal Variation of the Plant Material.

Note: This Is Computer Generated Specification & Does Not Require A Physical Signature.

