

RAW MATERIAL SPECIFICATIONS FOR COPPER WIRE DRAWING LUBRICANT

1. **Scope:**

The drawing lubricant for wet drawing all kind of copper wire from 8 mm copper rod down to 0.1 mm fine copper wire used in electrical cables manufacture

2. **Quality requirement :**

The lubricant emulsion with the following advantages:

- Extra ordinary emulsions and dies life.
- Unique lubrication.
- Excellent cleanliness of the wires surface.
- Excellent cleanliness of drawing machine, emulsion system cones and dies.
- Highly resistant against microorganisms.
- Low foam.

3. **Material:**

It shall meet the requirement as specified in the table given below:

Sr. No.	Propriety	Requirements
1	Density at 20 °C	0.945 g /ml Approx.
2	Conductivity @ 20 C° 10 % emulsion, dist. water	1100-1300 µS
3	Conductivity @ 20 C° 20 % emulsion, dist. water	1700-3000 µS
4	Viscosity at 20 °C	120-180 (mm ² /s) cSt Approx.
5	Ash contents	2,7 % Approx.
6	pH range for 10 % emulsions	8 –9,2
7	Working temperature	35 – 45 °C

4. **Packing**

The material shall be properly packed in strong steel barrels 180 – 200 kgs net in a manner that avoids problem in transportation & storage with safe tight closed opening

The material shall be marked for proper identification and clearly written on each barrel:

- Name of manufacturer
- Date of manufacture.
- Expire date.
- Net weight.

5. **Sample**

10 liters of drawing lubricant to reach our company before closing dates by express delivery unless his material is already successfully tested.

Sample shall be the basis for accepting or rejecting the offer.