

HALOGEN DFT is a specifically auxiliary formulated for Polyester dyeing of fibres, yarn and fabric. It is based on a blend of emulsifiers, solvents and specialty additives to yield levelled dyeing with polyester dyes, in acidic medium. It is a pale yellow, viscous liquid **HALOGEN DFT** is compatible with all textile auxiliaries and stable up to temperature 130°C.

Use of **HALGONE DFT** is polyester dyeing yields on average 10% increase in colour depth in dyeing as compared to dyeing with acidic medium only. It is use eliminates need for other auxiliaries and defoamer.

It is suitable for use in normal Jet Dyeing machines, Beam Dyeing machines as well as U-Tube Jet Dyeing Machines. For correction of patchy or uneven dyeing. **HALGOGEN DFT** offers a unique advantage of correction of uneven dyeing with high retention of colour value, thereby reducing the quantum of addition to be made for shade matching.

PROCEDURE FOR POLYESTER DYEING :

Material is loaded in the dyeing machine with desired liquor ratio. Add acetic acid to required PH level. Add HALOGEN DFT as per Table 1 below. Heat up to 60°C and run for 10 minutes. Add Polyester dyes properly dissolved in water slowly in to the machine. Raise temperature to 110°C to 130°C as required at desired temperature rate. Hold at the dyeing temperature for 30 minutes as usual. Cool to 70°C and drain water. Rinse with Hot and cold water as usual.

TABLE I

| Machine Used | Jet D | Beam Dyeing | U-Tube |
|----------------------------------|---------------------------------|---------------------------------|-----------------------------------|
| Qty of Material | 100 to 150 kgs | 100 to 150 kgs | 100 to 150 kgs |
| Qty of Water | 800 to 1000 lits | 800 to 1000 lits | 400 to 500 lits |
| Acetic Acid | As required | As required | As required |
| Qty of Halogen DFT In gpl / kgs* | 0.5 to 0.7 gpl 0.5 to 0.7 kg | 0.5 to 0.7 gpl 0.5 to 0.7 kg | 0.5 to 0.7 gpl 0.25 to 0.35 kg |
| Other auxiliaries ** | If required | If required | If required |
| Temperature Degree C | 110 to 130 | 110 to 130 | 110 to 130 |
| Hold time minutes | 30 to 45 | 30 to 45 | 30 to 45 |

* The quantity depends upon the molecular weight of dyes used.

** Other auxiliaries such as defoamers, lubricants etc may be added if required.

ADVANTAGES :

1. Levelled brighter shades
2. Higher colour yields thereby reducing consumption of dyestuff.
3. Less or no redyeing or conversion in to darker shades due to uneven dyeing.

FOR CORRECTION OF UNEVEN POLYESTER DYEING :

Occasionally uneven dyed yar or fabric may be produced due to many reasons such as improper dyes, power failure during the dyeing cycles, excessive loading of material, improper preparation of material for dyeing or equipment faults. **HALOGEN DFT** offers unique advantage of correction of such unevenly dyed material with higher colour retention, thereby reducing the quantum of addition of dyestuff.

Load material in to the dyeing machine along with water as required. Refer to Table II for the quantity of other chemicals required. Raise temperature of the bath to 5°C above dyeing temperature and hold for 45 minutes. Cool to 70°C and drain the bath. Follow up with hot and cold wash.

TABLE II

| Equipment | Jet Dyeing | Beam Dyeing | U-Tube |
|----------------------|------------------------|------------------------|------------------------|
| Qty of Material | 100 to 150 kgs | 100 to 150 kgs | 100 to 150 kgs |
| Qty of Water | 800 to 1000 lits | 800 to 1000 lits | 400 to 500 lits |
| Acetic Acid | As required | As required | As required |
| Qty. Of Halogen DFT | 2.0 to 2.5 gpl | 2.0 to 2.5 gpl | 2.0 to 2.5 gpl |
| Temperature Degree C | 5°C above Dyeing Temp. | 5°C above Dyeing Temp. | 5°C above Dyeing Temp. |
| Time minutes | 45 | 45 | 45 |

NOTE :

For material containing dyed yarn, levelling of uneven goods poses a problem due to bleeding of dyed yarn. I such cases, temperature may be limited to 90°C.

FOR STRIPPING OF POLYESTER COLOURS :

Often due to operating mistakes, or other reasons shades of dyed material requires to be stripped. For such purpose, procedure stated for correction of uneven dyeing may be followed along with 2 gpl of Caustic Soda and 2 gpl of Hydrosulfite of Soda. This way significant amount of polyester dyestuff will be stripped.

NOTE :

The information stated herein is based on our experience with the product and is given in good faith without any warranty. Depending upon processing machine used, the quantity and process may be set to suit the requirements..