



# MIRACHEM INDUSTRIES

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Off Western Express Highway  
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## TECHNICAL LITERATURE

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### EMCHILL - IRN

An excellent protection against **Oxycellulose & Catalytic damages** in the continuous ( P. T. R ) treatment of cotton and linen. Also enhances the final whiteness.



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## EMCHILL - IRN

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### Salient Features:

- Eliminate iron contamination from cotton, thus **preventing catalytic damages and pin holes.**
- Imparts **superior whiteness** after peroxide bleach
- Eliminate **Calcium and Magnesium** from cotton and prevents mineral salts scaling on the Cylinders in steamer & wash boxes.
- Compatible with desizing enzymes (  $\alpha$  amylases )
- High temperature stable ( up to 140<sup>0</sup> C )
- No / Low foaming
- Exhibits very high dispersing property & prevents the precipitation of insoluble salts in the bleaching bath
- Preoxalicacid padding before peroxide boiling ( to avoid pin holes ) is eliminated



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### Properties:

Appearance	: Pale Yellow to Yellow Liquid
Chemical Nature	: Phosphonic Acid Derivative
Ionic Nature	: Weakly Anionic
Solubility	: Soluble in cold water
pH ( 2 % Solution )	: 0.5 – 1.5
Stability to Acids / Alkalis	: Stable ( up to 40.0 gpl )
Foaming behavior	: Minimal Foaming

### Compatibility with

- Wetting agents : Good
- Cleaning agents : Good
- Stabilizers : Good
- Reducing agents : Good
- Oxidizing agents (H<sub>2</sub>O<sub>2</sub>) : Good

Storage Stability : Stable for 6 months

(When stored in a cool & dry place)



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### Method of Application:

#### DESIZING

##### *PAD BATCH PROCESS*

<b>Emcozyme - 40</b>	→ 4.0 – 5.0 ml / litre
<b>Instawet - NA</b>	→ 5.0 – 6.0 ml / litre
<b>Emchill - IRN</b>	→ 4.0 – 8.0 ml / litre

pH : 6.5 – 7.5

Temperature : 80 – 90° C

Batch – Rotate → 6.0 – 8.0 hours

##### *PAD STEAM*

**Emcozyme - HT SUPER** → 4.0 – 5.0 gpl

**Instawet - NA** → 4.0 – 5.0 gpl

**Emchill - IRN** → 4.0 – 8.0 gpl

Steam Temperature : 100 – 102° C

Duration : 1.0 – 3.0 minutes



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### ***BLEACHING (C.B.R)***

<b>Mirasol - FNC</b>	→ 1.5 – 2.5 ml / kg
<b>Miralyzer CIPHA Liquid</b>	→ 3.0 – 6.0 ml / kg
NaOH Lye ( 48 <sup>0</sup> Tw )	→ 10.0 – 40.0 ml / kg
H <sub>2</sub> O <sub>2</sub> ( 50 % )	→ 10-0 – 30.0 ml / kg
<b>Emchill - IRN</b>	→ 4.0 – 8.0 ml / kg

Steam : 15.0 – 20.0 minutes

### ***PAD – BATCH PEROXIDE BLEACHING***

<b>Mirasol - FNC</b>	→ 4.0 – 6.0 ml / kg
<b>Miralyzer CIPHA Liquid</b>	→ 5.0 – 8.0 ml / kg
NaOH Lye ( 48 <sup>0</sup> Tw )	→ 20.0 – 40.0 ml / kg
H <sub>2</sub> O <sub>2</sub> ( 50 % )	→ 30-0 – 50.0 ml / kg
<b>Mirableach - PEW L/F</b>	→ 2.5 – 5.0 ml / kg
<b>Emchill - IRN</b>	→ 4.0 – 8.0 ml / kg

Pad – Rotate → 16.0 – 24.0 hours



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## EMCHILL – IRN

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### *MERCERISATION*

**Emchill - IRN** → 2.5 – 3.5 ml / kg

### *PAD STEAM (SCOURING)*

NaOH Lye ( 48<sup>0</sup> Tw ) → 20.0 – 60.0 ml / kg

**Mirasol - FNC** → 2.0 – 4.0 ml / kg

**Emchill - IRN** → 4.0 – 8.0 ml / kg

Steam : 5.0 – 10.0 minutes.

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## EMCHILL – IRN

### General safety instructions

General safety rules for handling chemicals should be observed in storage, handling and use. The product should not be swallowed. For further information, please consult existing safety data sheet.

#### Note :

The data contained in this communication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. Responsibility for compliance with the requirements of the downstream textile market rests with the textile processor.

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### **Contact Information:**

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