

## **EVOLUTION BLACK** / Performance components of the system

#### **Diresul® Evolution Black liq**

### **Groundbreaking Black denim**

- Exclusive sulfur black technology with outstanding resource savings in dye manufacture.
- Unique shade and wash-down behavior compared to standard black providing new, innovative aesthetics
- Especially recommended for dark black shades, with no bronzing effect



### **Direfix® GPF liq**

#### Booster for smooth & clean oxidation

 Catalytic solution that works in combination with Hydrogen peroxide for the full shade development of **Diresul® RDT** dyes and cleanest oxidation system in the market

#### Optifix® E50 liq

### Enhances color fixation and cleaner effluent

 Strong bi-cationic fixing agent, especially for sulfur dyes fixation that increases wet fastness properties and works synergistically with the oxidation system

### Optifix® RUB liq [optional]

### Crocking fastness improver for raw black fabrics

• Formaldehyde free crocking fastness improver with minimal influence on hand feel

Reducing Agent D p – biodegradable reducing agent Leonil® EHC liq c – anionic wetting agent

# **EVOLUTION BLACK** / Main benefits in a nutshell

- Safe products from a reliable global 'SAFE' WITH: partner who applies international safety standards
- PCA and Aniline free system
- · Massive reduction on water consumption from dyestuff to fabric and less charged effluents
- Delivers consistent result for premium quality
- · Variety and new wash-down effects
- Controlled and safe chemistry for the end consumer
- Embracing sustainable production & lower impact clothing
- · Industry leading technology

Archroma's EVOLUTION BLACK system









Archroma's EVOLUTION BLACK system vs. benchmark black denim







#### **'ENHANCED' WITH:**

**'EFFICIENT' WITH:** 

Archroma's EVOLUTION BLACK











CASE STUDY: Italian Customer, Slasher range

\* Below limits of detection according to industry standard test methods

99% water saving and zero residues at the dyestuff manufacturing step compared to standard sulfur black dve synthesis (considering water needed in production and in wastewater treatment for salt dilution). 27% savings at the denim textile mill (As demonstrated by ONE WAY Impact Calculator. CASE STUDY: Italian Customer, Slasher range. Compared to benchmark black dyeing process)

# THE ARCHROMA WAY TO A SUSTAINABLE WORLD /

### Safe + Efficient + Enhanced = The Ultimate Collection



### **SAFE - IT'S OUR NATURE TO PROTECT**

A solid core: Our deeply rooted goal to protect people and our planet. Safe to use, safe to release and safe to touch and wear.

### **EFFICIENT - IT'S OUR NATURE TO RETHINK** SUSTAINABLE MANUFACTURING

Innovating application processes that minimize resources and maximize productivity, both in our and our customers' manufacturing as well as by setting ourselves ambitious sustainability goals.

### **ENHANCED - IT'S OUR NATURE TO ADD ANOTHER LEVEL OF VALUE**

Innovation is critical. With it, we create additional effects, functionalities and aesthetics and sustainable differentiation to bring additional value, helping consumers to achieve their goals, for a life enhanced.

ARCHROMA MANAGEMENT LLC Brand & Performance Textile Specialties Neuhofstrasse 11, 4153 Reinach Switzerland