



# VEGAN

## FRIENDLY PRODUCTS

### FOR GARMENTS & FABRIC CARE



## Atlantic care chemicals:

Founded in 1980 as a trading company dealing in textile chemicals since then the company has transformed itself into a global manufacturer and supplier of chemical products for Textile, Clothing and Garment finishing, Hospital Hygiene, commercial and hospital linen cleaning, Institutional Cleaning and sanitization, bakery Ingredients and food additives..etc and we now boast of our presence from a tiny Arab Emirate of Dubai to all over the world, having a world class R & D laboratory and product innovation Centre in association with Atlantic care chemicals, Canada and manufacturing facilities in India, UAE and Malaysia, offices and representative offices spread across 30 countries and most of the continents.

Atlantic as a global specialty chemical company strives to be at the forefront for more sustainable, environmental friendly safe products as well as to achieve sustainability in its application and process. Combine our unique competency in chemical engineering and molecular biology offers innovative solutions to create sustainable value to our customers, employees and stake holders. Our plants are GMP and ISO 9001 certified and the products in textile and garment segments are certified for GOTS version 5, Green screen and registered with ZDHC.

[atlanticchemicals.com](http://atlanticchemicals.com)







# VEGAN CLOTHINGS

No harmful chemicals, No animal products

Every chemical products we list here is vegan. There is a special place in our hearts for brands who have committed to being 100% vegan clothing and can do all supports needed for the dyeing ,processing and garment finishing with chemicals products have no animal products in the formulation and packaging . These are for the brands have taken a stand and are either certified vegan, or publicly commit to being 100% vegan.

Inspiring fashion THOUGHTS by realizing animal-derived material contribute to a multifaceted environmental crisis, so making responsible choices by creating fashionable wares with recycled, cruelty-free, and sustainable materials. The vegan fashion revolution will continue to influence designers as they see the beautiful possibilities of recycled plastic bottles, cork, wood, industrial waste, rubber, and other materials. Ethical, eco-conscious fashion is the wave of the future. Most of the chemical products listed are the recycled or synthesized waste materials of plants or lingo cellulosic origin.

This eco-conscious brand appeals to fashionists everywhere with its on-trend designs and high-quality fabrics, made without animal or animal derived products find great vegan looks.

# Chemicals

The chemical products created without having ingredients or packaging materials made from or derived from animals. Products are created without animal- testing or having raw materials that are tested on animals. A formulation where we have tried maximum possibilities to include environmentally benign substance. All the products listed are certified and screened by green screen and / or GOTS version 5 standards and ZDHC listed.

Nontoxic and bio degradable.
Vegan friendly.
No animal origin products
No animal tested products
Completely sustainable and non-pollutants.
Synthesized or derived from plant waste or sustainable organic materials.
Low consumption of energy, finite resources and high productivity oriented.
Screened by US EPA safer choice program (TOX lab Washington).
Green screen certified and ZDHC
GOTS version 5 certificates.



\*GOTS Approved Additive\*  
Approved by Control Union  
PRJ C 811333

**ZDHC**  
Zero Discharge of  
Hazardous Chemicals

## Why vegan?

Animal waste contribute a major source of pollution. This is majorly from waste of animals after processing, Antibiotics and hormones, chemicals from tanneries, fertilizers and pesticides used for feed crops etc.

■ Malnourishment in the developing world	■ Species extinction
■ Water scarcity	■ Land degradation
■ Pollution	■ Global warming / carbon foot prints.
■ Deforestation	



# Animal farming and climate change

Livestock contributes up to 51% of all global greenhouse gases. 37% of all methane emission comes from cattle farming. On an average a dairy cow belches 500lts of methane every day. By avoiding animal based products we can reduce substantial carbon emissions.

Sustainable ZDHC Vegan chemical ranges from Atlantic:

Keeping with its mandate we have coined the concept VEGAN CHEMISTRY to induce sustainable, low carbon, safe product development in the context of new global sustainability challenges in the fashion industry. It's by undertaking initiatives in developing and implementing products, synthetic process systems and policies that encourage environmentally responsible fashion thoughts. It includes policymaking, animal caring, improved industrial production processes, resource-efficient productivity management, complete realization of energy to initiate low carbon foot prints etc.



Vegan friendly  
Garment Care

# Novosize Oxy +

One shot de size amalgamated with enzyme process,  
save water energy and time. Highly sustainable non ABS process.

One shot de-sizing agent in solid form which alone is sufficient in the process to address dye re-deposition, lubricity and to remove size, PVA and other additive used in yarn sizing. It also neutralizes formaldehyde content if present in garment. OXY is developed by green chemistry. The product is consumed in the bath itself and will not impose any hazardous to discharge water. Novosize OXY helps to amalgamate the process with enzyme wash which can potentially save large quantities of water, time and energy.

Here you could see how the term PHYSICS can substitute chemicals products, which is the pre-requisite for initiating ZDHC, where as a philosophy eliminate chemicals precisely polymers and surfactants as much as possible that are either not exhausted or consumed in the process bath. The major contribution of BOD, COD in effluent are from ABS and other surfactants used in the conventional denim garment processing.

Finding environmental benign substance like modified clay as the platform performer for substituting synthetic polymers and surfactants to prevent back staining (ABS) is a path breaking innovation and holistic approach for Zero discharge.

The powder or agglomerate particle of the clay divided in to primary crystal plates caused by the swelling of the clay. The average size of primary crystal plates of the clay is approximately 1  $\mu$ m. After being dispersed in the treatment liquor the dyes and the contaminants are adsorbed by the clay particles, resulting in a gradual color reduction and reduced re-deposition of leached out indigo dye contaminants.

## Certificates

Green Screen  
ZDHC  
US EPA Safer Choice programme.  
Green screening -TOX Lab Washington, DC  
EPA SCIL Full Green Circle (100%)



■ EPA SCIL Full Green Circle (100%)



Vegan friendly

Garment Care

# Novowash ESL plus

Non GMO Neutral Enzyme – Powder

The product is derived from Fungus *Chrysosporium lucknowense* which is a plant origin and VEGAN friendly. Hetero functional Neutral powder enzyme, for high activity and low back staining. This one of the vegan friendly greenest and safest enzyme screened by Green Screen with 99 % green score. High strength-retain ability and grey cast are the major attributes.

The enzyme process can be amalgamate with de-sizing by using Novosize OXY plus. The combined process by addition of 'OXY plus' first and followed by enzyme. After drain the rinse is recommended with Novo Bio Bright O2. This process no need additional bath and high contrast, clean looks, brighter effect, very low back stain and high thread clarity. High strength retention and fast production are the major takeaways. No need to use any ABS, or other additive during processing.

## Benefits – Application

- Hetero functional powder fungal cellulases which is having ultimate performance in neutral / alkaline conditions supports easy processing and high efficiency.
- Amalgamation of process save time and man hour.
- Ensures high quality finish, high strength retention and better surface appearance.
- High quality garment finish with even abrasion looks and high clarity of sewing threads.
- Cleanest and brighter finish with high thread clarity.
- Highly sustainable and Vegan friendly.

## Certificates

Green Screen,  
ZDHC

Vegan Friendly

US EPA Safer Choice programme

TOX Lab Washington, DC

Hazard Classifications for Chemicals Present in the Novowash ESL Plus

SCIL Full Green Circle (98.758%)

SCIL Yellow Triangle (0.284%)



■ EPA SCIL Full Green Circle (100%)

Vegan friendly

Garment & Fabric Care

# Novowash NBL 1600

Vegan friendly “fungal cellulase enzyme from *Chrysosporium lucknowense*

The neutral liquid bio polishing and bio stoning enzyme developed from same strain for a highly polished and abraded looks in denim and polished look without loss of colors in solid dyed garments. The neutral working condition helps to save time utility and energy by combining bio polishing and dyeing in one bath. It gives exceptionally clean fabric surface on denim garments with increased color brilliancy due to the removal of fuzz.

High temperature stability helps to have longer shelf life. One of the vegan friendly greenest enzyme of this class with 99.3% green score and highest strength retention. Exceptionally well for female cellulosic tops and bottoms with high color brilliancy. Modified for Nono-Molecular mist in E-flow machines.

The enzyme process can be amalgamate with de-sizing by using Novosize OXY plus in the case of denim processing. The combined process by addition of 'OXY plus' first and followed by enzyme NBL 1600. After drain the rinse is recommended with Novo Bio Bright O2. This process no need additional bath and high contrast, clean looks, brighter effect, very low back stain and high thread clarity.

## Benefits – Application

- Superior fabric and garment defibrillation under neutral pH condition.  
High quality finished goods with increased colour brilliancy and higher fabric strength.  
Efficiency in all type of processing equipment.
- The scour boosting property of this cellulose by removing the non-cellulosic impurities improves the dye uptake and offer uniform dyeing.
- Very minimum strength loss after processing improves the fabric quality.
- Better color retention and color brilliancy enable the product usage before and after dyeing.

## Certificates

GOTS version 5.0

Green Screen,  
ZDHC

Vegan friendly

US EPA Safer Choice programme.

Hazard Classifications for Chemicals Present in the Novowash NBL 1600.TOX Lab Washington, DC.

EPA SCIL Full Green Circle (99.210 %)

EPA SCIL Yellow Triangle (0.790 %)



■ SCIL Full Green Circle (98.758%)

▲ SCIL Yellow Triangle (0.284%)



'GOTS Approved Additive'  
Approved by Control Union  
PRJ C 8.11533



Vegan friendly

Garment & Fabric Care

# BLD 520 - Spandex Safe

Hetro-functional vegan friendly semi bleveaching Liquid non GMO Enzyme for spandex denim finishing.

Vegan friendly "fungal cellulase enzyme from Chrysosporium lucknowense. This enzyme is specially developed to work in both acid and neutral conditions, enable it for denim and non-denim, fabric application. For denim garment processing this is extremely safe to use for high stretch fabric need high abrasion and light bleach. BLD 520 in neutral conditions give excellent abrasion and semi bleach look with high strength retention and exceptionally clean look. This will reduce the bleach exposure of garment result in high stretch and strength retain ability. This is modified for E-flow machine for heavy stone washes.

It's a non GMO enzyme works in Acid conditions for bio polishing with very minimal strength loss. Low dosage can give better results leaving less fuzz. Excellent color cutting in acid conditions and high strength retention. In neutral conditions it can be combined with dyeing in one bath process. BLD 520 Acid - Bio polishing enzyme (Amphoteric charged).

## Benefits – Application

- Spandex can be well protected in heavy denim processing.
- Amalgamation possibility save time, energy and water.
- Amphoteric charged enzyme which can works well in both acid and neutral conditions enables finishing of denim garments (neutral) and bio polishing (acid).
- Ensures high quality finish, high spandex strength retention, better surface finish and semi bleached look on denim garments (neutral) and bio polishing and colour down effect (acid).
- Easy application and excellent results.

## Certificates

GOTS version 5.0

Green Screen

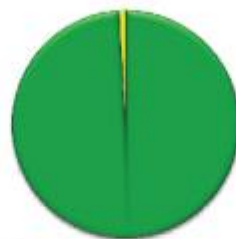
ZDHC

US EPA Safer Choice programme. Hazard

Classifications for Chemicals Present in the Novowash BLD520. TOX Lab Washington, DC

EPA SCIL Full GreenCircle (99.085 %)

EPA SCIL Yellow Triangle (0.915 %)



■ SCIL Full Green Circle (99.085%)

■ SCIL Yellow Triangle (0.915%)



"GOTS Approved Additive"  
Approved by Control Union  
PRJ C 811333



Vegan friendly  
Garment Care

# Bio bright O<sub>2</sub>

Prevent storage yellowing

It's an enzymatic post washing detergent which can effectively remove the re-deposited indigo, residues of chlorine, manganese dioxide or any other chemical residue left on garments during processing. The product is designed by using enzyme as the platform chemistry and organic components as additives. By the application of this product before softening will protect the garments from storage yellowing. Displayed below are each component of the product and its contribution for contributing desired results.

Sodium per carbonate is the active neutralizing agent for the residual chemicals carried over from the previous wash steps. It is a chemical adduct of sodium carbonate and hydrogen peroxide, a colorless, crystalline hygroscopic water soluble solid which is enzymatically activated with fungal peroxidase enzyme. Apart from accelerating and stabilizing the release of perhydroxyl ion (HO<sub>2</sub>) for the neutralization of residual chemicals, the enzyme peroxidase neutralizes the colors leached out from the garments during processing.

Tetraacetylenediamine (TAED) is used as the chemical activator for the process to prevent the mal odor generated during storage. It's by disinfecting the microbial spores survived in the process, which can potentially proliferate in favorable conditions during packing and storing. It's by the formation of per-acetic acid in the process bath. Protease enzyme: Alkaline protease enzyme from native fungal isolates *Aspergillus niger*, a vegan friendly enzyme. Thermo alkaline bleach stable fungal protease enzymes can digest and remove the undesirable re-deposition of indigo dye occurred during enzyme washing. The modified thermo stable protease enzyme compositions separate the core and binding domains of cellulase left with indigo on the fabric surface. This process will avoid the loose indigo sites which attract Ozone.

## Certificates

Green Screen

ZDHC

US EPA Safer Choice programme.

Hazard Classifications for Chemicals

Present in the Novo Bio Bright O<sub>2</sub>, TOX Lab Washington, DC

EPA SCIL Full Green Circle (100%)



■ EPA SCIL Full Green Circle (100%)



Vegan friendly

Garment & Fabric Care

# Novofade Active

Hydrogen Peroxide replacement

Vegan friendly enzyme Product from filamentous fungus *Cochliobolus lunatus* ( Flavin) and Peroxidases from *Aspergillus niger*'

This is an enzymatic replacement of hydrogen peroxide for both the textile as well as garment application. The enzymes used are vegan friendly fungal native species without genetically modified. Product is catalyzed by organic agent to enhance activity at lower temperature.

### Denim application:

High ecological benefits can be brought in by the induction of this product in denim garment wet processing. The most effluent toxic surfactants and polymers can be completely eliminated by this product in combination with Novofade Control. The pumice stone can be completely replaced by the post enzyme treatment with Novofade active and control. High contrast with heavily abraded look, clean threads and high strength retention are the major attributes.

### Sulfur garments:

The safest way of processing sulfur garments for any level of color reduction without losing strength. The caustic/ peroxide treatment conventionally used for color reduction is having many disadvantages other than the exposure hazard and high strength loss due to the cleaving of inter molecular hydrogen bond of celluloses. The process is much faster than conventional process and substantial saving of time can be achieved.



## Certificates

Green Screen

ZDHC

US EPA Safer Choice programme. Hazard Classifications for Chemicals Present in the Novofade Active. TOX Lab Washington, DC

EPA SCIL Full Green Circle (100 %)



■ EPA SCIL Full Green Circle (100%)

Vegan friendly  
Garment & Fabric Care

# Novofade Control

Safe Alkali

Novofade control is specifically developed to support Novofade active as a buffer to maintain consistent PH throughout the process. Non dusty crystals ensure safe exposure. The product is screened 100% green by green screen.

## Benefits – Application

- Improve the finish clarity and garment strength.
- Consistent look and appearance.
- Used to support Novofade Active for many finishes including scouring, sulphur reduction,
- pumice stone re-placement in denim processing extc. etc.

## Benefits – Ecological

- Alkaline crystals safe to exposure and discharge.
- In combination with Novofade active it helps to eliminate Conventional alkali / peroxide scouring and many synthetic surfactants.
- In combination with novo fade active, eliminate the usage of pumice stone in denim processing.
- Eliminate the usage of ABS and other supporting polymers in conventional denim processing.
- Improves garment quality which is essential for sustainable business.

## Benefits – Commercial

- Consistent quality improves productivity.
- Save inventory cost by eliminating the usage of costly surfactants and polymers ( ABS, Wetting, Lube etc.)
- Elimination of pumice stone in denim washing saves energy, time and improve productivity.

## Certificates

Green Screen  
ZDHC

Vegan friendly.

EPA SCIL Full Green Circle (100 %)

US EPA Safer Choice programme. Hazard Classifications for Chemicals Present in the Novofade Control. TOX Lab Washington, DC.



■ SCIL Full Green Circle...



Vegan friendly  
Garment Care

# Novochlor Neutra

One shot organic chlorine/ PP neutralizer, deodorizer and cleaner

It's a one-shot organic neutralizer for chlorine and potassium permanganate induced bleaching and finishing in garment processing. This is an intelligent approach which can substitute inorganic hazardous reducing agents and its potential impact on garment attributes like tensile strength and stretch recovery. The complete neutralization ensures reduced ozone damage, non-yellowing and good tensile strength retention. Reaction kinetics is controlled by an enzyme with additives supporting the neutralization of chlorine and potassium permanganate.

It is an active neutralizing agent for the residual chlorine carried over from the bleach and followed rinse steps. It is a crystalline hygroscopic water soluble solid which can potentially neutralize the residual chlorine completely from the garment surface.

In acid conditions (pH 4-5) it can completely neutralize the potassium permanganate and remove complete residue of metal from the surface. Due this the attraction of light and photon rays on the surface will be minimized, reduce the chance of light and ozone fading.

Very effective neutralization of residual chlorine and its smell on garments. The complete removal of MnO<sub>2</sub> and metal contamination enhance the look of garments and other related aesthetics.

## Certificates

Green Screen  
ZDHC

Vegan friendly.

US EPA Safer Choice programme. Hazard Classifications for Chemicals Present in the Novochlor Neutra. TOX Lab Washington, DC

EPA SCIL Full GreenCircle (97 %)

Greenscreen Benchmark U (5%)



■ SCIL Full Green Circle (95%)

■ GreenScreen Benchmark U (5%)

Vegan friendly  
Garment & Fabric Care

# Bio Grun

Soda Ash replacement

Bio Grun is a unique blend of the safest alkalis for the replacement of inorganic alkali, such as soda ash in the pre-treatment (yarn) and dyeing process. This is a detailed study report to evaluate its performance in dyeing various levels of shade and the benefits associated with application, ecological, economical etc. the product is certified by green screen, ZDHC and US EPA safer choice program by TOX Washington. This is one of the safest choice in this class by attaining 100 % green score in the screening.

Soda ash is the commonly used alkali in the dye bath for attributing pH required for the fixation of dyes. However the fixation results are generally too low and less than 70% in the case of soda ash. This resulting low dye yield and highly colored dye house effluent. More than 50% of the water consumption and related cost are associated with the washing off stages to remove the unfixed or hydrolyzed dyes. The cost associated with the effluent treatment for color and the removal of soda ash residues are really substantial and tedious. Under this circumstances the innovation of ZDHC replacement of soda ash (BIO GRUN) bring in substantial gains associated with effluent treatment and process improvement.

## Benefits – Application

- Level dyeing
- Better light and wash fastness.
- Improve light fastness.
- Available in both powder and liquid form.

## Certificates

Green Screen

ZDHC

US EPA Safer Choice programme.

Hazard Classifications for Chemicals Present in the Bio Grun. TOX Lab Washington, DC.

EPA SCIL Full Green Circle (100%)

Greenscreen Benchmark U (0)



■ SCIL Full Green Circle (100.093%)

■ GreenScreen Benchmark U (0.132%)



Vegan friendly

Garment & Fabric Care

# Celloscour Varie

Dyebath leveling agent

Which simplifies the dyeing steps, ensures uniformity and reproducibility of dyeing, permits dyeing with different types of dyes in combination, and reduces the limitations on dyeing conditions for individual fibers and blended products. This is new way of looking in to the process to monitor the exhaustion, fixation and hydrolysis of dyes. Surfactant free alkaline leveling agent is a new in its class having ultimate performance to improve fixation and minimize dye hydrolysis. This leveling agent can improve the productivity and cost reduction of dyeing and also increases the versatility of colors that can be selected, which are the most important subjects in the dyeing industry.

The Alkaline/ enzymatic leveling agent Celloscour Varie readily disperses or dissolves in dye bath along with Bio grun. It produces its effect when added in an amount of 15 – 20 % of Bio Grun dosage. **This is a customized product to use along with Bio Grun ( Soda Ash Replacement) for high dye yield and better fixation.**

## Benefits – Application

- It permits uniform dyeing with good reproducibility.
- It permits to be added all at once without any adverse effect on the uniformity and reproducibility of dyeing. This simplifies the dyeing steps, making in-process sampling unnecessary and giving more chances of achieving the desired dyeing by a single pass.
- All this leads to the streamlining and cost reduction of the dyeing process.
- It gives an extremely bright color or dye quantity can be reduced.
- It permits the use of dyes together in combination.

## Certificates

GOTS version 5

ZDHC

Vegan friendly.



'GOTS Approved Additive'  
Approved by Control Union  
PRJ C 811333

Vegan friendly

## Garment & Fabric Care

# Novofinish PF

Ozone fastness, tearing strength, seam slippage, washing and rubbing fastness improver

This is permanent solution for ozone fastness and light fastness associated with dye distortion due to photon rays and ozone. Also improves tearing strength and seam slippage. Improves the body of fabric and can attribute the linen or paper finish to garments. It's an absolute innovation in organic chemistry to address most of the bitter pills of garment processing. These damages are inflicted by the photon rays during storage.

### AFTER BLEACH - APPLICATION

Action	Time (min.)	Temp. (Celsius)	Water Level	pH	Chemical
Neutral	10		Med	7	Novochlor Neutra
Rinse	3		High		
Soaping	10	50 - 60	Med		Bio-Bright O <sub>2</sub>
Rinse	3		High		
Softener	5		Low		Novosoft AZ
Rinse	3		Med		
Rinse	5	50	Low		Novofinish PF

## Certificates

Green Screen  
ZDHC

EPA SCIL Full GreenCircle (75%)

US EPA Safer Choice programme.

Hazard Classifications for Chemicals Present in the Novofinish PF. TOX Lab Washington, DC.

EPA Safer Choice Acceptable (25%)



- EPA SCIL Full Green Circle (75%)
- EPA Safer Choice Acceptable (25%)



Vegan friendly

## Garment & Fabric Care

# Block 70

Color blocking and rubbing fastness improver

It's a bleach stable color blocking agent used for creating special effects on garments and block the color to improve rubbing fastness on sulfur, indigo and reactive dyes garments.

### Benefits – Application

- Permanent patches can be created by print - spray - oven dry method.  
Increases crocking, light, ozone and wash fastness of indigo and sulphur dyed garments.
- Increases the resistance to shrinkage.
- Does not require an additional catalyst.

### Benefits – Ecological

- It improves effluent quality.
- No exposure hazard.

### Benefits – Commercial

- Since there is no requirement of any catalyst, saves inventory and storage space.
- Reduces effluent treatment cost.



## Certificates

Green Screen

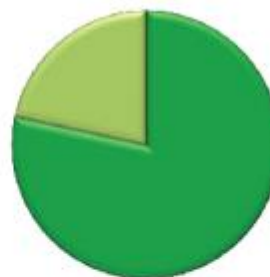
ZDHC

US EPA Safer Choice programme.

Hazard Classifications for Chemicals Present in the Block 70. TOX Lab Washington, DC.

SCIL Full Green Circle (78.4%)

FMD Acceptable (21.6%)



■ SCIL Full Green Circle (78.4%)

■ FMD Acceptable (21.6%)

Vegan friendly

Garment & Fabric Care

# Novo Greengrease DF2

poly glycol based organic resins vegan friendly

It is a specially developed organic finishing agent (cross-linking) from a plant origin product glycerol. This innovation supports the industry to trivialise the usage of DMDHEU and similar inorganic resins containing formaldehyde. Works catalyst free to get desired effects.

Major attribute of this product is high garment strength retention and non-yellowing property.

It can be used to produce 3d effects, whiskers, wrinkles etc on garments in dry processing. It can also be used for the easy care finishing of woven and knitted fabrics in cellulosic fibres and its blends with synthetic fibres.

Garment wrinkle free finishing can be done by impregnation or exhaustion and dry cross-linking at 130 degree centigrade.

## Benefits – Application

- Permanent creasing by spray – curing application.
- It will not adversely affect the fabric strength.
- Improves fabric strength.
- Improve the surface feel and no stiffness or brittleness.
- Increases the resistance to shrinkage.
- Does not require an additional catalyst.

## Certificates

Green Screen

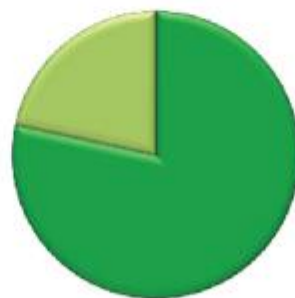
ZDHC

US EPA Safer Choice programme.

Hazard Classifications for Chemicals Present in the Block 70. TOX Lab Washington, DC.

SCIL Full Green Circle (65%)

FMD Acceptable (35 %)



■ SCIL Full Green Circle (78.4%)

■ FMD Acceptable (21.6%)



Vegan friendly

## Garment & Fabric Care

# SRP PX 160

Salt re-placement

The halogen derivative (AOX, TOX) salts used commonly in garment and textile dyeing make serious impact on human, aquatic health and environment. SRP PX 160 is the most environmental friendly innovation on the replacement of inorganic salts.

### Benefits – Application

- A product to substitute inorganic non bio degradable salt and soda ash in the dyeing of anionic dyes.

### Benefits – Ecological

- Chloride and sulphides are toxic to aquatic life and impacts vegetation and wildlife. There is no natural process by which chlorides are broken down, metabolized, taken up, or removed from the environment. Wildlife is also prone to high sodium levels by ingesting salt or drinking water runoff from snow and ice melt. Salt-laden water can also percolate down through the soil profile, coming into contact with soil particles, soil microbes, and plant roots.

### Benefits – Commercial

- Reduces effluent treatment cost drastically by eliminating inorganic salts.
- Less storage space needed.



Vegan friendly

Garment & Fabric Care

# ECOLITE GC

Sodium Hydro Sulfite Replacement in dyeing and reduction clearing

Eco lite GC is a reducing agent for indigo and other vat dyes and is an excellent substitution for sodium hydrosulfite in color stripping and reduction clearing. It is safer to use, has a greater strength, and has a better shelf life. It can be used for stripping cellulose fiber or bleaching wool or silk.

The redox potential, reducing power and stability of ECO LITE GC is well determined and compared with sodium hydrosulphite. It's effectiveness in the reduction clearing of polyester dyeing and prints is well examined using wet fastness tests. When used in equi-molar amounts, hydrosulphite and Eco-LITE GC give a wash fastness of 4-5 at 60°C. The perspiration resistance is equally good for all reduction clearings (4-5).

ECOLITE GC was applied as reducing agent during the dyeing of cellulosic fibers with commercial sulphur dyes. The same dyes were also applied to dye baths containing sodium sulphide. It was found that the intensity and fastness properties of the dyeing by both methods were similar. Analysis of the exhausted dye baths indicates that ECOLITE GC may be considered as the most environmental friendly substitute for sodium sulphide during the application of sulphur dyes. This will provide an improved method of dyeing of fibrous products using an oxidation – reduction dyeing type in an aqueous alkaline solution.

## Certificates

GOTS version 5

ZDHC

Vegan friendly.



'GOTS Approved Additive'  
Approved by Control Union  
PRJ C 811333



Vegan friendly  
Fabric Care

# Cello gen PK EC

Vegan friendly fungal catalase enzyme - Peroxide Killer

Cello gen PK EC is a catalase derived from the submerged fermentation of a non GMO fungal strain aspergillus niger. It is proven to be highly effective in catalyzing the decomposition of hydrogen peroxide in to oxygen and water. In the textile processing it the most effective and preferred choice to break down the residual peroxide in to inert water molecules. This product can accommodate a broad range of Ph and temperature and remains effective at high concentration of hydrogen peroxide.

## Benefits – Application

- Highly efficient peroxide removal.
- Reduces water consumption
- Peroxide molecules are break down in to inert water molecules.

## Certificates

GOTS version 5  
ZDHC  
Vegan friendly.



'GOTS Approved Additive'  
Approved by Control Union  
PRJ C 811333

Vegan friendly

Garment & Fabric Care

# Biolite Crystal

Zero Discharge High performance scouring technology -  
CBR, CDR woven fabric and for low quality semi carded fabrics.

ZDHC scouring is an absolute innovation in organic chemistry which address the pit falls of conventional scouring method Alkali – peroxide treatment and the recent innovation enzymatic scouring. A well balanced design which makes the fabric suitable for one bath bleaching and providing all the attributes for dyeing with very minimal impact on environment, substantial saving in water consumption, energy and process time with almost 2.5% gain on fabric weight, thus dye yield and tensile strength. Non enzymatic, non-surfactant and non-inorganic alkali based product design gives highly consistent results, highly absorbent fabric and very cost effective. Increased productivity and low effluent treatment cost are other advantages.

## Benefits – Application

- Highly cost effective and energy saving, and reduces almost three rinses. Since caustic soda is not an easily risible alkali, it demand many rinse and more quantity of mineral acid for core alkali neutralization. Drastic reduction of water consumption and time of process are resultant gains.
- Reduce the usage of mineral acid used for neutralization.
- Reduction of TDS more than 70%.
- Fabric weight gain up 2-3 % in dyeing process.
- Improve fabric appearance, softness and wicking abilities.
- Efficiency of effluent treatment improves due to non-surfactant, foaming related issues and cost reduction due to less treatment chemical cost.
- Improves the chemical handling, storage and transport with in premise and absolutely no risk of product handling.
- Reduces the storage space, inventory and associate difficulties to meet compliance related to risk.
- Highly economical and most efficient processing to get consistent results.

## Certificates

GOTS version 5  
Vegan friendly



'GOTS Approved Additive'  
Approved by Control Union  
PRIC 811333



Vegan friendly  
Garment & Fabric Care

# Aeltex PW 106

ZDHC scouring and one bath bleaching technology

Aeltex PW 106 is a one shot organic garment finishing agent that complies with ethical fashion concepts. Non enzymatic finishing of garment with high strength retention, complete polishing, excellent finish look and low back staining. This product is built in with color reducer, non-surfactant based wetting, lubricating, demineralizing agent, peroxide stabilizer, de-sizing and dye suspending agent etc. it can be used for the reduction of indigo and sulfur dyes, scouring of garment during garment dyeing, polishing of garment etc...

## Benefits – Application

- Highly cost effective and energy saving, and reduces almost three rinses. Since caustic soda is not an easily risible alkali, it demand many rinse and more quantity of mineral acid for core alkali neutralization. Drastic reduction of water consumption and time of process are resultant gains.
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- Fabric weight gain up 2-3 % in dyeing process.
- Improve fabric appearance, softness and wicking abilities.
- Efficiency of effluent treatment improves due to non-surfactant, foaming related issues and cost reduction due to less treatment chemical cost.
- Improves the chemical handling, storage and transport with in premise and absolutely no risk of product handling.
- Reduces the storage space, inventory and associate difficulties to meet compliance related to risk.
- Highly economical and most efficient processing to get consistent results.

## Certificates

GOTS version 5

Green Screen

ZDHC

US EPA Safer Choice programme.

Hazard Classifications for Chemicals Present in the Aeltex PW106. TOX Lab Washington, DC.

EPA SCIL Full Green Circle (97%)

Greenscreen Benchmark U (3%)



■ SCIL Full Green Circle (97%)  
■ GreenScreen Benchmark U (3%)



"GOTS Approved Additive"  
Approved by Control Union  
PU C 811533

Vegan friendly  
Garment & Fabric Care

# Novosoft LV 90 Extra

Non-yellowing hydrophilic softener paste for all fibers

## From filth to wealth..

This product is developed from sugar cane Bagasse , an agricultural waste.

It is an amphoteric charged poly alkyl ester of poly-hydric alcohol, modified and pre hydrogenated softener concentrated paste. This can be used as both non-ionic and cationic softeners. Non yellowing, anti-ozone and hydrophilic properties of it makes it unique for all type of garments and textiles. Very smooth hand with high moisture absorption and anti-static properties.

Unique in application of garment dyed and denim garments. Due to the color fixing property it can improve the wash and rub fastness as well. Addition of acid (H+) makes it cationic charged softener and can be used for dark dyed fabric and garments. For white and pastel colors no need of acid addition. Non-ionic is better. At pH 6 it works as anti-ozone softener.

## Benefits – Application

- Improves hydrophilic properties of fabrics and fix the dyes.
- Amphoteric charged. Non-ionic nature can be shifted to cationic by the addition of acid ( H+).
- Prevents static build up.
- Non yellowing
- Increases fibre lubrication
- Produces a soft, silky handle for all type of fabrics.
- Exhibits no tendency for sublimation shade.
- Does not affect the whiteness of brightened goods
- Minimizes needle breakage and optimizes machine efficiency.
- Anti-ozone property.

## Certificates

Green Screen

ZDHC

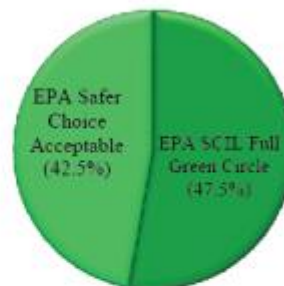
GOTS version 5

S EPA Safer Choice programme.

Hazard Classifications for Chemicals Present in the Novosoft LV 90 Extra. TOX Lab Washington, DC.

EPA SCIL Full Green Circle (47.5%)

EPA Safer Choice Acceptable (42.5%)



■ EPA SCIL Full Green Circle (47.5%)

■ EPA Safer Choice Acceptable (42.5%)





Vegan friendly  
Garment & Fabric Care

# Novosil P 3000

Nano Emulsion Nonionic Silicone Softener

Novosil p 3000 is made with most advanced D-6 (do deccamethyl cyclohexasilixane) chemistry in nano emulsion, for superior softness, uniform encapsulation and optimum siloxane density on the fiber surface. It offers not only surface slickness, but also flexible, bulky and rich hand feel. It can easily convert a normal fabric to premium grade. The product is nonionic and recommended for cotton knit and woven fabric, polyester fleece, velvet and velour, cotton fleece, acrylic fiber knit, wool woven and knit, cashmere knit, silk woven etc..

## Benefits – Application

- Non yellowing.
- Non-ionic and hydrophilic.
- Can be applied along with resins.
- Excellent for sports and active wear.
- Excellent for cotton, synthetics and blends.
- Improved crease recovery and fabric elasticity.
- Improved antistatic properties.
- Excellent effect at low level addition
- Stable over broad temperature level(40- 90OC).
- Stable over wide pH range ( 2-11).

## Certificates

Green Screen

ZDHC

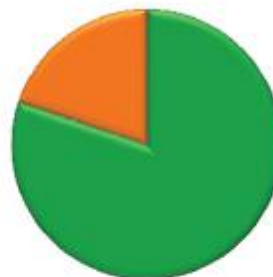
GOTS version 5

US EPA Safer Choice programme.

Hazard Classifications for Chemicals Present in the Novosil P 3000. TOX Lab Washington, DC.

SCIL Full Green Circle (81%)

Green Screen Benchmark 2 (20%)



■ SCIL Full Green Circle (81%)  
■ GreenScreen Benchmark 2 (20%)



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# Supersoft 016

Nano-Micro Emulsion silicone softener for Bouncy feel.

4th generation fabric enhancer and softening agent developed from D6- the safest silicone (do deccamethylcyclohexasiloxane) in micro emulsions.

Its softening capability comes from the siloxane backbones flexibility and its freedom of rotation along the Si-O bonds. This enables the low interacting methyl groups to arrange themselves so they face away from the surface fibers, thereby reducing the fiber to fiber interaction. Because the fibers are able to slip easily past one another, they do not stick together. The natural spring is unimpaired. Volume increases and fabric become fluffier, bouncy and soft to touch. Since 'water loving' polyether groups are attached to the silicone, the fabric become more absorbent and hydrophilic.

The silicone polyether block co-polymers in the SUPERSOFT 0160 is prepared by hydrosilylating Si-H terminal silicone polyether block copolymer with an epoxy functional olefin. Then, the epoxy groups are reacted with an amine to convert the epoxides into beta-hydroxyamine groups. Alternately, the epoxy groups reacted with tertiary amine salts to convert the epoxides into beta hydroxy quaternary ammonium groups.

The advantage of using the hydrosilylation chemistry in SUPERSOFT 0160, is in conjunction with the amine-epoxide chemistry, that most polymer chains will contain hydrophilic polyether blocks and two amine groups. Furthermore, since the amine groups are at the chain end, it is possible to use a minimal amount of amine to **minimize yellowing of fabrics.**

## Certificates

Green Screen

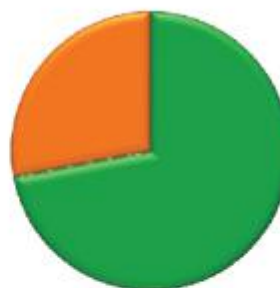
ZDHC

US EPA Safer Choice programme.

Hazard Classifications for Chemicals Present in the Supersoft 016. TOX Lab Washington, DC.

SCIL Full Green Circle (72%)

GreenScreen Benchmark 2(28%)



■ SCIL Full Green Circle (72%)

■ GreenScreen Benchmark 2 (28%)



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# Novosil ULTRA HF

Moisture wicking and moisture management softener

4th generation fabric enhancer and softening agent developed from D6- the safest silicone (do deccamethylcyclohexasiloxane) in micro emulsions. This can impart excellent wicking performance to textiles. Moisture management, cool comfort, anti-static and hydrophilic softener. Apart from this it will attribute excellent softness to the treated garments.

Product is suitable for cellulosic and regenerated cellulosic, protein fibres, non-woven etc. the product is non-yellowing and extremely safe to use on white fabrics. The non-ionic nature make it compatible with other components that may be used during the finishing.

## Benefits – Application

- Moisture wicking and hydrophilic
- Cool and comfort finish
- Anti-static
- Rapid strike through
- Moisture management and quick drying
- Low VOC
- Increased fiber lubrication and excellent softening
- Improved sewability, improved tear strength/ bursting strength and abrasion resistance to finished fabrics.
- No influence on wet and dry soiling.
- Increases fabric resilience and enhances care and easy ironing finishes.

## Certificates

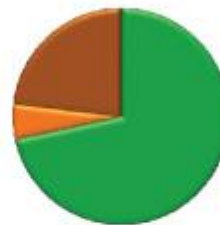
GOTS version 5

ZDHC

US EPA Safer Choice programme.

Hazard Classifications for Chemicals Present in the Novosil Utra HF. TOX Lab Washington, DC.

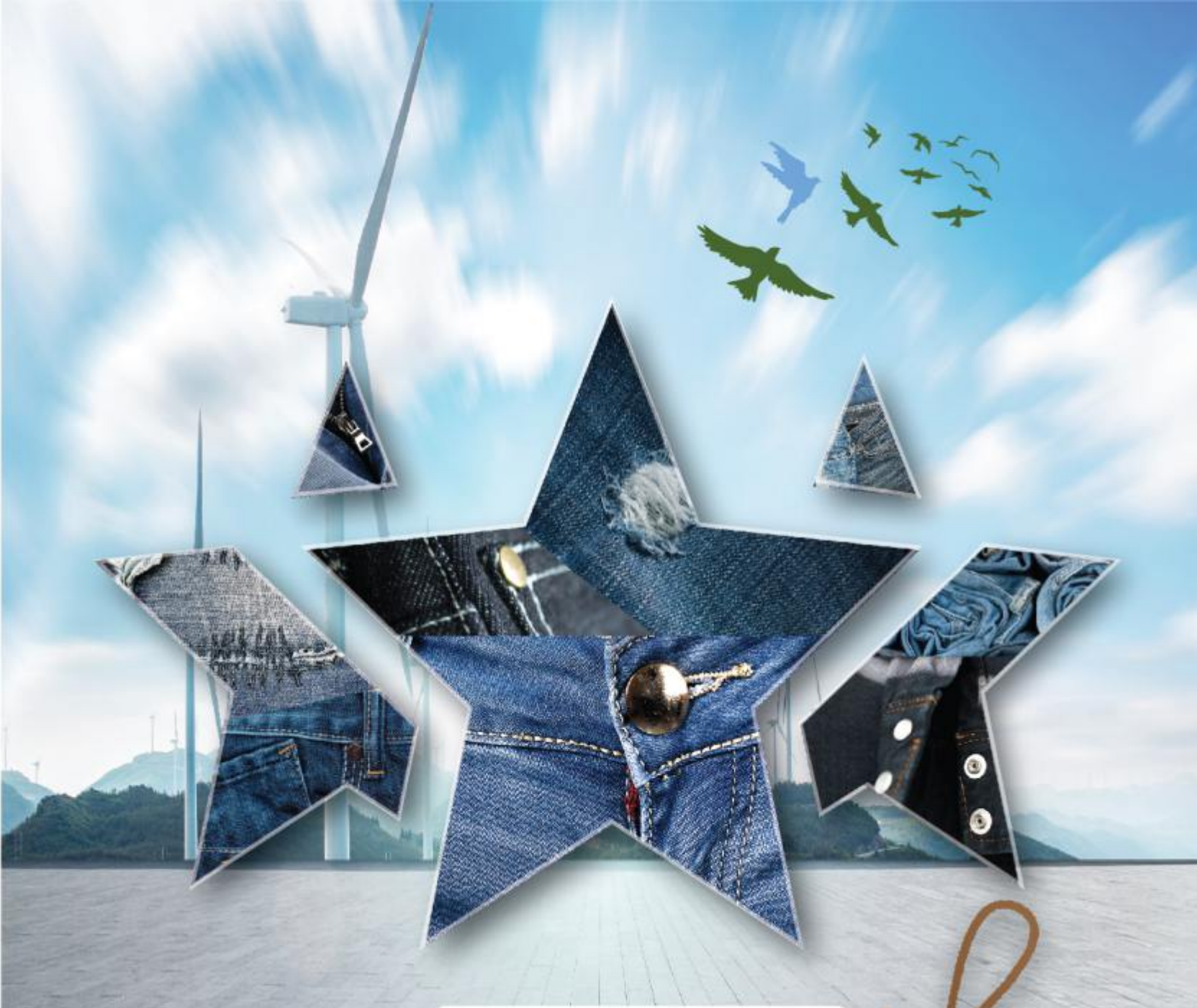
SCIL Full Green Circle (72%)



■ SCIL Full Green Circle (71.99%)  
■ SCIL Yellow Triangle (0.0014%)  
■ GreenScreen Benchmark 2 (5.32%)







# GREEN TAG

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