



**A SUSTAINABLE FUTURE
IN HAND PROTECTION**



INTRODUCING
TD02 SUSTAIN

Traffi[®]
THE HAND PROTECTION SPECIALISTS



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**YOUR CARBON NEUTRAL
HAND PROTECTION
PARTNER**

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A SUSTAINABLE FUTURE IN DISPOSABLE GLOVES

-  **Biodegradable**
-  **Industrial compostable***
-  **Recyclable packaging**



INTRODUCING TD02 SUSTAIN

TRI POLYMER BLEND DISPOSABLE GLOVE



Key features

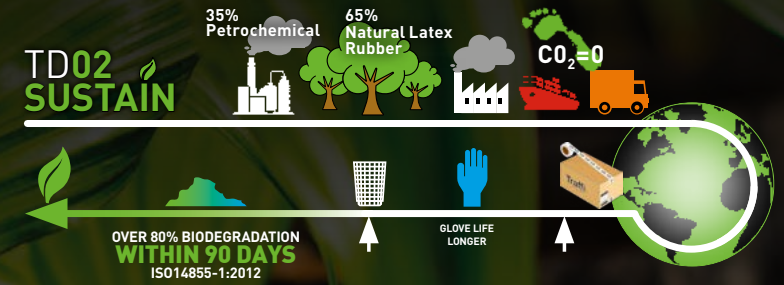
- **25% Increase** in stretch and comfort so less hand fatigue
- Its cooler to the skin, thanks to the new **3TP technology**
- Its considerably **more comfortable** and closer fit than standard nitrile, even after repeated stretching
- **Skin friendly and dermatologically approved.**
- It is made with a higher content of **raw material sustainably produced locally** within our supply chain in Sri Lanka, so the pricing is more stable
- Lower carbon footprint in production.

Ideal for

- Medical
- Pharmaceutical
- Laboratory
- General purpose
- Mechanical

Standards

- EN 374-1, 2, 4 & 5
- EN455 Part1, 2 & 3
- EN16523-1
- ASTM D 3578
- ISO 9001:2015
- ISO 13485:2016
- Rapid biodegradation within 90 days – ISO 14855-1:2012
- Food Approved – EN1186 / Regulation EU 10/2011



* ISO 14855-1:2012 Industrial composting – a multi-step, closely monitored composting process with measured inputs of water, air, as well as carbon and nitrogen-rich materials. An industrial composting facility optimises the process to ensure rapid biodegradation of organic material by controlling conditions like shredding material to the same size or controlling the temperature and oxygen levels and ensuring that a high quality, toxic-free compost is produced.

JOINED UP THINKING



Sustainable development has been defined in many ways, but the most frequently quoted **definition** is from Our Common Future, also known as the Brundtland Report:

“ Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Source: Brundtland Report



DOES THE PRODUCT BENEFIT LOCAL COMMUNITIES?

Most definitely yes.

This has a direct benefit to the local communities as it provides stable employment, access to education, housing and sanitation.

Over 60% of the rubber content is grown within the supply chain locally in Sri Lanka.



IS THE PRODUCTION PROCESS SAFE FOR WORKERS?

Traffi has a dedicated production line for the **TD02** in Sri Lanka.

To ensure we always exceed all minimum expectations for employee welfare and safety, We show our customers complete transparency of supply chain and factory conditions.

Our factory is fully certified and audited by SEDEX, QIMA, ISO18001, inspected according to the Traffi Code of Conduct, and audited by our own team regularly. Our glove factory partner offers on-site employee housing, free medical care, education programmes, and more. Throughout the pandemic we have brought in further safe working practices throughout our entire supply chain, to ensure we continue to keep all our workers and customers safe.





IS THE PRODUCT ENVIRONMENTALLY SOUND?

Absolutely.

We've changed the ingredients of traditional disposable gloves, which have a heavy carbon footprint, to a far lighter and more sustainable and measurable one. The key ingredient change is using exceptionally high-quality natural rubber, grown in our own factory plantations in Sri Lanka, then blended with other synthetic polymers, including nitrile, creating a master blend. The trees that produce the natural rubber then go on to be used as biomass wood pellet fuel for the factory, therefore providing sustainable power and heat, and a lower carbon footprint in production.

Nitrile rubber used in a traditional disposable glove is produced using petroleum-derived materials and is a synthetic rubber copolymer of acrylonitrile and butadiene. This means that it is not a natural product and its actual raw material processing and production can have detrimental effects to the environment.

TD02 has been proven to rapidly biodegrade far faster than other nitrile biodegradable gloves on the market. This is due to its unique tri-polymer structure. Traditional nitrile gloves can take over 100 years on landfills. TD02 degrades by an impressive 82% within 90 days and is also highly suitable for industrial composting. * Tested to ISO 14855

We are also making considerably less harm to the environment, less shipping and road miles & less petro-chemical ingredients and in the future we aim to reach carbon neutral.

TD02 degrades by an impressive 82% within 90 days and is also highly suitable for industrial composting.

24% of medical solid waste is composed of rubber gloves, with 57-80% of this being disposed in landfill

Within the first six months of the COVID -19 response, NHS England's issued PPE is calculated to have generated 158,838 tonnes of CO₂e, equating to 882 tonnes per day





IS THE PRODUCT ECONOMICALLY VIABLE?

Absolutely.

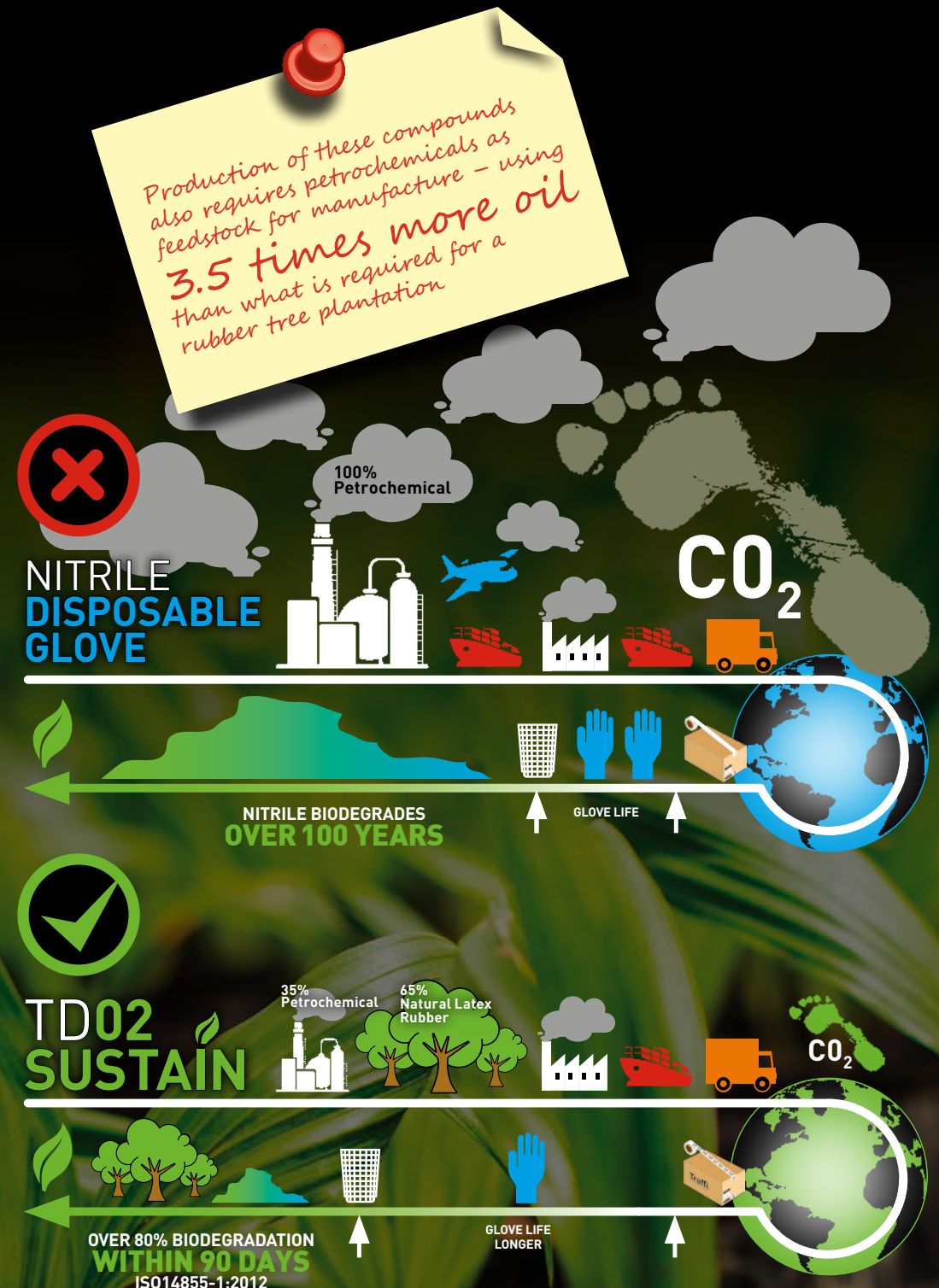
Our unique TD02 benefits from being not wholly a single source polymer product.

By using a greater balance of materials generated more locally within the country, we can provide a more stable and robust supply chain. Material source lead times and supply exposure are thereby able to be reduced.

Our production process and manufacturing plants are state of the art and thereby maximise efficiency savings.

The majority of the environmental impact from synthetic rubber (Nitrile Butadiene) production is consumed by the steam cracking process – swamping the impact of worldwide transportation.

85% less energy is used per tonne to process natural rubber compared to nitrile rubber.





IS THE PRODUCT SAFE FOR CONSUMERS?

TD02 has been dermatologically approved by the Skin Health Alliance (SHA) and carries this mark on all packaging.

The SHA is the leading international skin health authority working closely with dermatologists, researchers, and skin scientists. SHA award professional accreditation to companies, services and brands seeking specialist independent dermatological recognition for their product research.



DERMATOLOGICALLY APPROVED

We test for extractable protein content and maintain levels below 25µg per g. We also test for the specific Hev B allergen content to ensure these will always remain at low levels in completed production.

TD02 is certified to EN374 and EN455 and complies fully with the HSE specific approach and guidance for single use non powdered latex gloves.

Studies have also shown that health care workers displaying sensitisation to natural rubber latex have been non-responsive to low-allergen, low-protein and powder-free latex gloves

Type IV hypersensitivity is linked to the vulcanising chemicals (accelerators and anti-oxidants) used in the manufacture of both nitrile and latex gloves



FAQS

1. Is latex a sustainable product and does its extraction have a positive effect on our planet?

Natural rubber, broadly referred to as latex is not a harmful product. It has been widely used for many years as a premium sustainable polymer choice in mattresses, pillows, medical equipment, tubing, adhesives, catheters, disposable gloves, swim caps and balloons.

This natural plant-based substance appears in various forms in over 12000 different species of plants, protecting them from insects and disease.

A rubber tree (Hevea Brasiliensis) through photosynthesis consumes carbon dioxide (CO₂) and generates oxygen back into the environment, whilst also supplying the raw latex. The harmless 'tapping' removes a milky sap from the bark of the tree. The tapped trees do not get chopped down in the process and have a lifespan of up to 25 -30 years. At the end of their lifespan in our Sri Lanka plantations they are then processed into biomass pellets thus providing a more sustainable energy source.

In contrast to this, synthetic nitrile rubber is 100% derived from un-sustainable petrochemicals that upon disposal then take over 100 years to degrade in the environment. Upstream delivery carbon footprint miles from the oil refinery to the glove factories adds even further damage and environmental impact.

2. Is the TD02 protective against virus, bacteria and fungus?

The TD02 has been tested against BSEN ISO 374-5:2016 which specifies the requirements and test methods for protective gloves intended to protect the user against micro-organisms such as bacteria, virus or fungi.

Penetration protective gloves against virus, bacteria and fungi shall not leak when tested according to EN 374-2: 2014 (this standard uses both an air and water leak test).

Many disposable gloves will test and claim for bacteria and fungi protection, but in order to claim for virus we have also completed the additional testing to ISO 16604: 2004 (clothing for protection against contact with blood and body fluids – determination of resistance of protective clothing materials to penetration by blood-borne pathogens). This signifies that the TD02 shows no detectable transfer (→PFU/ml) of the Phi-X174 bacteriophage through its unique tri-polymer blend.

3. What chemicals has the TD02 been tested against?

TD02 has been tested against EN374. Everyday products that EN374 (K, O, P) chemicals are found in include sodium hydroxide, ammonium hydroxide and hydrogen peroxide. These cover de-greasers, general cleaning products, floor, glass, carpet and upholstery cleaners and disinfectants.

4. What is a safe level of latex proteins?

The recommendations in hand protection products is that the latex protein should be 50µg/g or less. At 50 µg/g, the product will be considered very low risk of allergic reaction. Our TD02 gloves, due to our unique tri-polymer production processes, are able to achieve levels of under 25 µg/g making the chances of an allergic reaction even less likely.

It has already passed all applicable EN standards and is also fully derma accredited by the Skin Healthcare Alliance. This dermatological accreditation involves a scientific review performed by the Skin Healthcare Alliance team of independent dermatologists. This is a professional analysis of a product's research including a thorough assessment of the ingredients, clinical trials data and proof of efficacy.

5. Is the TD02 packaging sustainable?

Yes, our TD02 packaging is 100% recycled and 100% recyclable.

6. How is getting TD02 from a factory in Sri Lanka a more sustainable solution?

Raw material content - We are producing over 55% of the raw material within our own circle of influence. This is achieved by using natural rubber from our plantations in Sri Lanka that therefore also reduces the upstream CO₂e delivery miles. The TD02 has a significantly smaller carbon footprint compared to nitrile. High impact CO₂e petrochemical content has been reduced significantly in this product.

End of life – TD02 has been tested to ISO 14855-1:2012 for its biodegradation and achieves 82% within 90 days.

Nitrile gloves can take over 100 years to degrade!

We are a fully certified carbon neutral business which means our operational CO₂e footprint is annually audited, offset and independently ISO certified. The CO₂e footprint of the TD02 from the factory gates (Sri Lanka) to the end user is therefore offset at no additional cost to the customer.

7. What are the working conditions of the TD02 factory in Sri Lanka?

Traffi has a dedicated production line for the TD02 in Sri Lanka, to ensure we always exceed all minimum expectations for employee welfare. We also want to show our customers complete transparency of supply chain and factory conditions. Our factory is fully certified and audited by SEDEX, QIMA, ISO18001, inspected according to the Traffi Code of Conduct, and audited by our own team regularly. Our glove factory partner offers on-site employee housing, free medical care, education programmes, and more.