

# Triflow Lubricants

Technical Information  
November 2010



# Key Products

- Triflow Lubricant
  - Spray
  - Liquid

## **TRI-FLOW™** The High Performance Industrial Lubricant



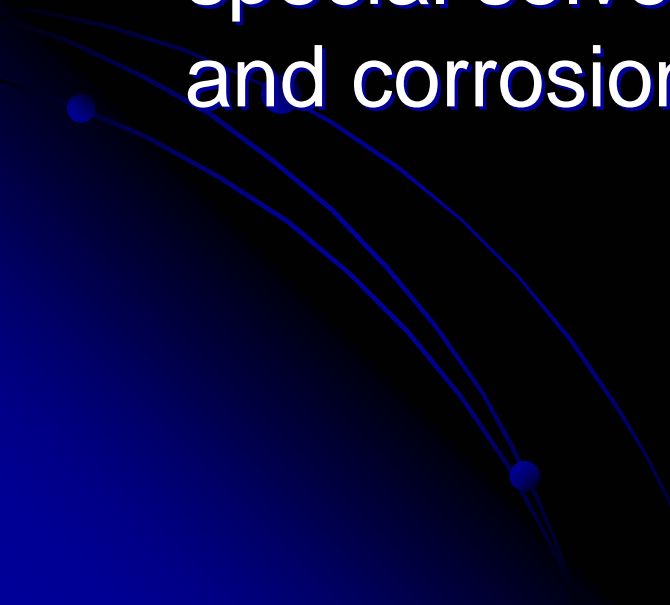
Triflow provides preventative maintenance and problem solving solutions for the most demanding applications.

Its unique formula also contains P.T.F.E. to maximise load bearing, reduce friction and wear and resist corrosive build up.

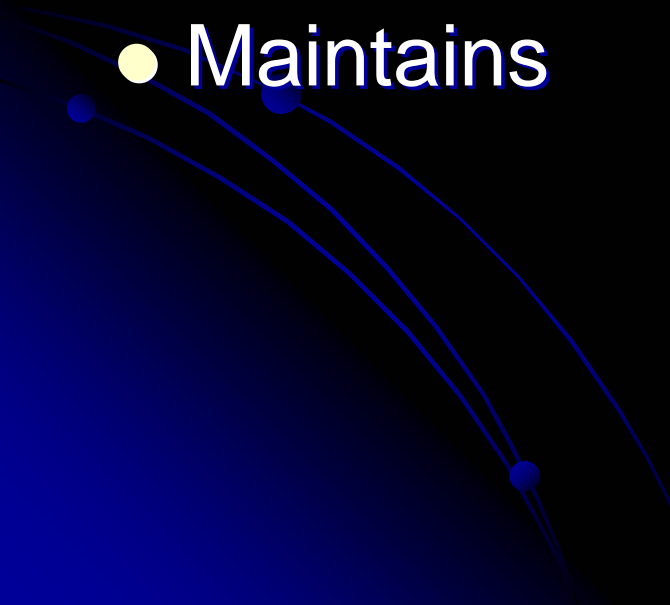
- Lubricates ● Penetrates ● Protects

**TRI-FLOW - FOR THE TOUGHEST JOBS**

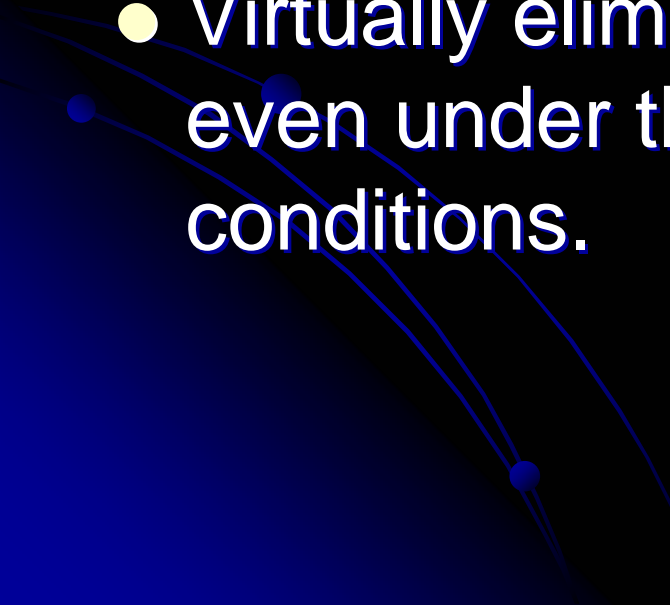
# Triflow Lubricant – What is it?

- Triflow is a multi component lubricant containing high-grade petroleum oils, micronised PTFE, corrosion inhibitors, moisture displacers, penetrating aids and special solvents to soften and remove dirt and corrosion.
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# Advanced Penetrating Lubricant

- Reduces friction and wear
  - Displaces abrasive matter
  - Penetrates
  - Protects against corrosion
  - Maintains
- 

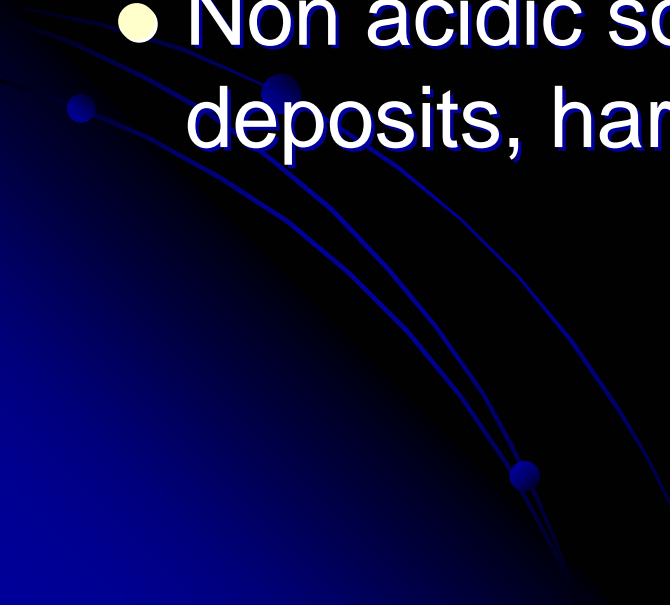
# Reduces Friction and Wear

- P.T.F.E. has one of the lowest coefficients of friction of all materials.
  - It is combined with a complex carrying agent to form a highly durable film.
  - Virtually eliminates wear on moving parts, even under the most abrasive or corrosive conditions.
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# Displaces Abrasive Matter

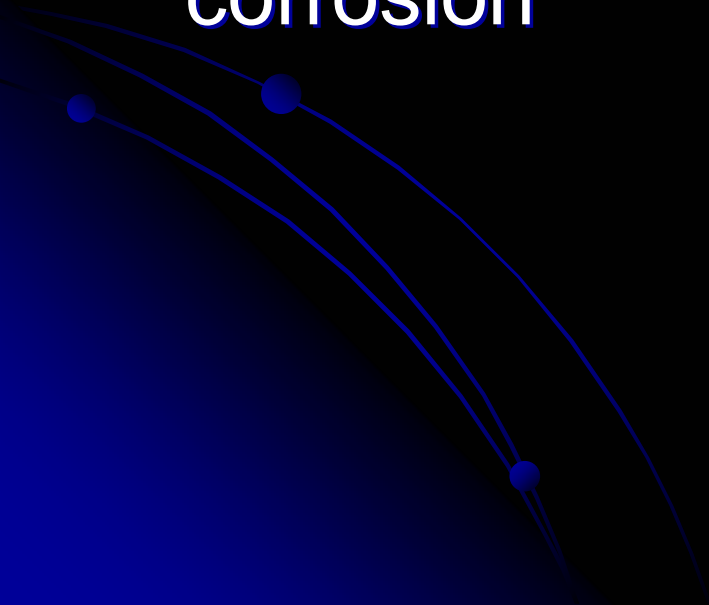
- Solid substances do not adhere to a surface treated with Triflow.
- Dirt, dust, sand and other abrasive matter already present are displaced and then dispersed by the action of the PTFE particles on the moving surface
- Subsequently, treated surfaces are cleaned ***and kept clean.***
- Conventional oils and greases combine with foreign matter to form a damaging grinding paste: this is completely avoided with Triflow.

# Penetrates

- Triflow has exceptionally low viscosity and surface tension.
  - This allows it to penetrate quickly into the most inaccessible areas.
  - Non acidic solvents break down carbon deposits, hardened grease and sludge.
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# Protects against corrosion

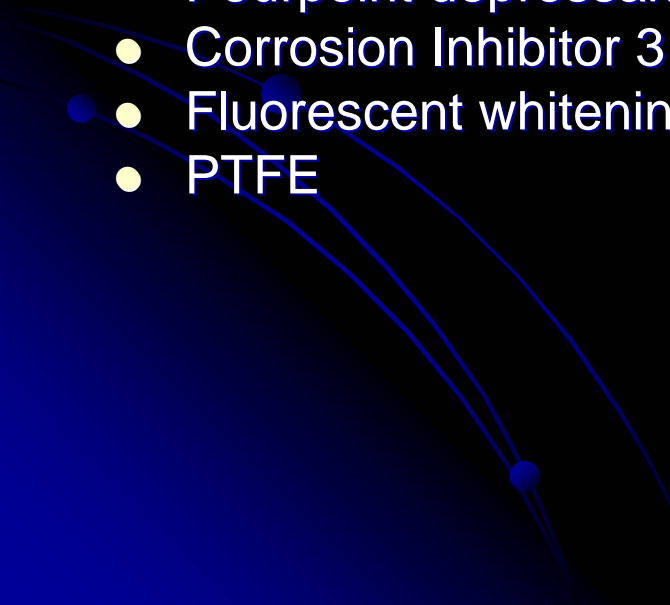
- Displaces moisture, thereby preventing the formation of rust.
- Tough barrier film protects and lubricates surfaces guarding against wear and corrosion



# Maintains

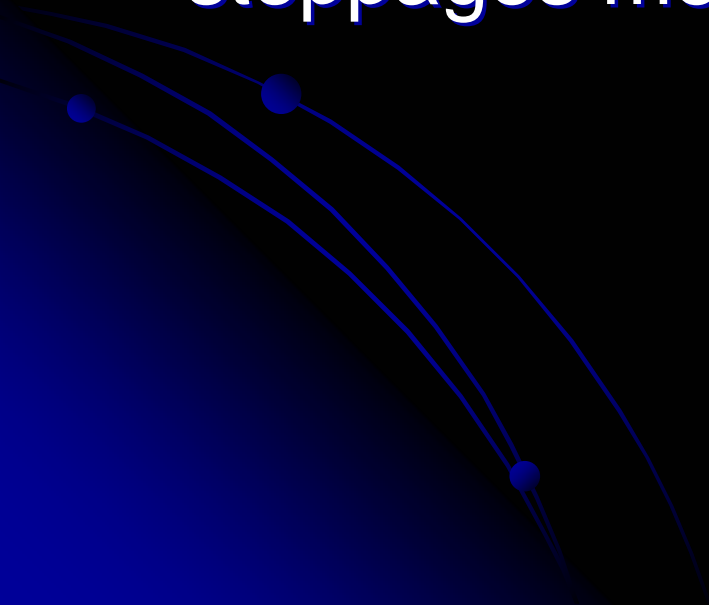
- Keeps expensive plant and equipment in service for longer.
- Reduces the frequency of expensive breakdowns caused by worn and dirty parts.
- Servicing equipment is easier – stripping down, part replacement and re-assembly are all speeded up.

# Key Components and Functionality

- Paraffinic Oil – Carrier oil
  - Dearomatised White Spirit – Solvent/Diluent
  - Functional Solvent 1 – Solvent to aid cleaning and penetration
  - Dispersant Additive – Keeps components in solution
  - Functional Solvent 2 – Solvent to break down contamination
  - Corrosion/Antiwear additive
  - Corrosion inhibitor/moisture scavenger
  - Pourpoint depressant
  - Corrosion Inhibitor 3
  - Fluorescent whitening agent
  - PTFE
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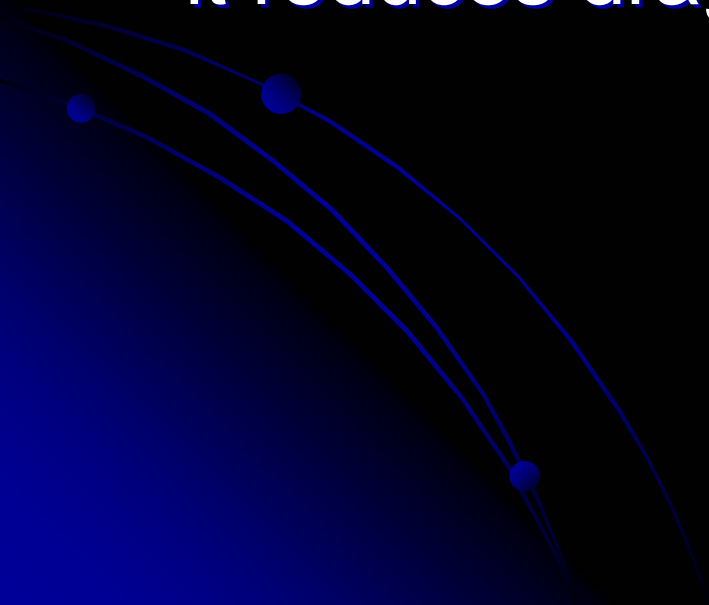
# Triflow – for surfaces that...

- Slide – Linear bearings in conveying systems and process machinery move smoothly and easily, even under great pressures. Faster operation and fewer stoppages mean increased productivity.



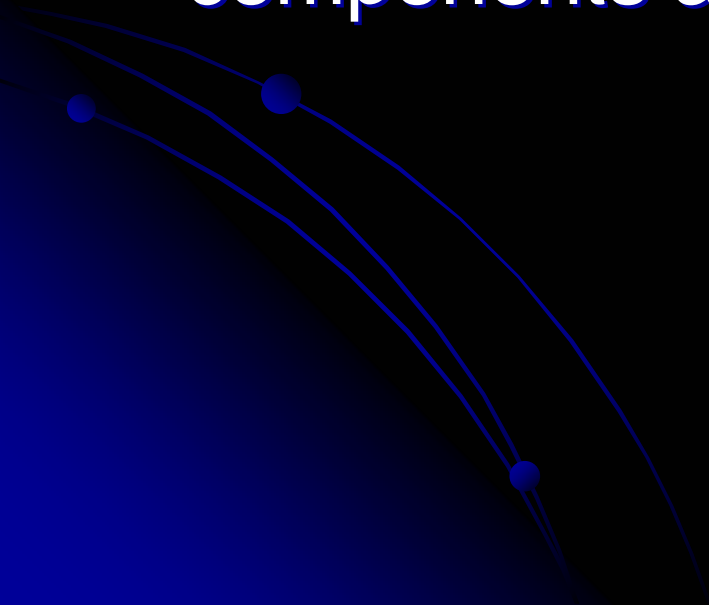
# Triflow – for surfaces that...

- Glide – Monorails for suspended doors, assembly and carriage systems never jerk or jam once treated. Additionally, because Triflow physically displaces contaminants, it reduces drag and ensures free running.

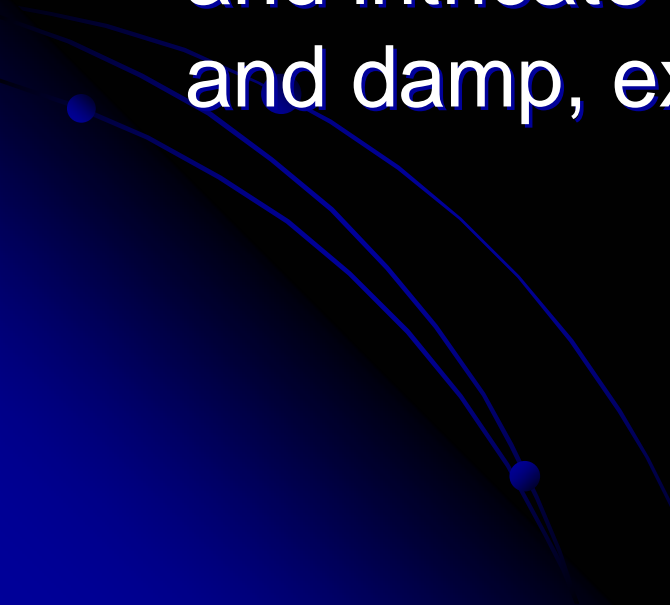


# Triflow – for surfaces that...

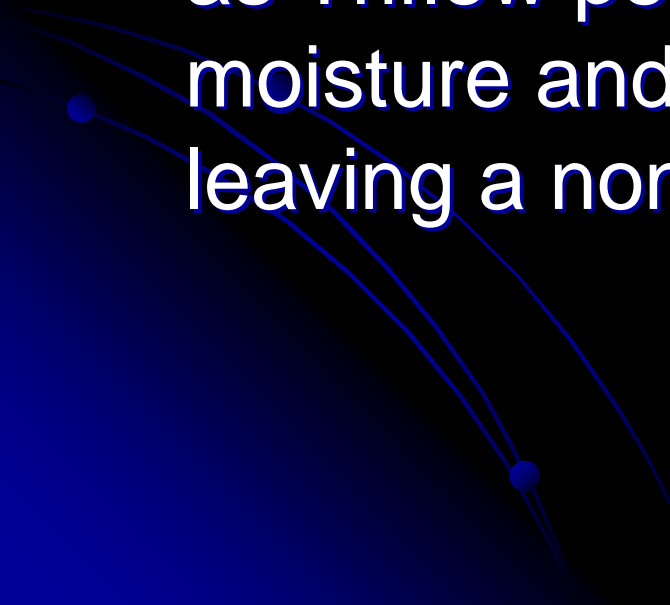
- Roll – Heavy duty bearings, roller tracks and conveyor chains stay clean. Essential components do not clog or distort, minimising strain and damage, both to components and to drive machinery.



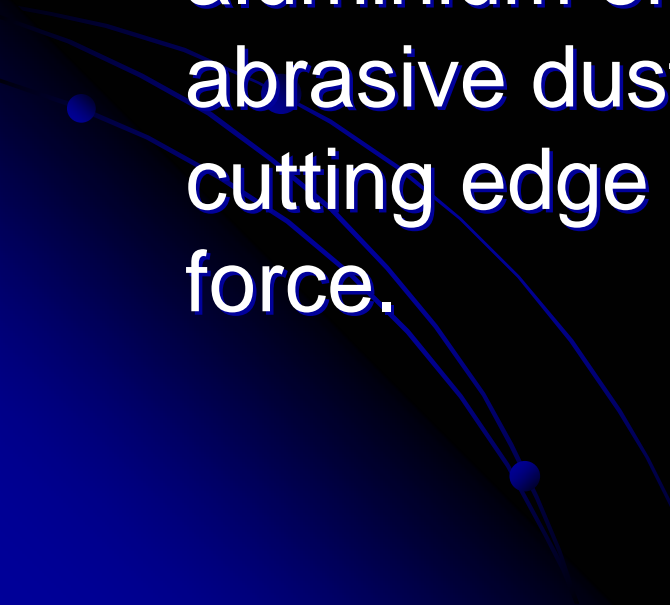
# Triflow – for surfaces that...

- Turn – Leading lock manufacturers and car makers ensure that precision parts resist seizure due to dirt corrosion or freezing with Triflow. Moisture is displaced and intricate mechanisms stay free of rust and damp, extending their useful life.
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# Triflow – for surfaces that...

- Twist – Steel ropes and cables used in applications such as shipping and quarrying stay flexible and last longer. Fractures due to corrosion are minimised, as Triflow penetrates to the core, expelling moisture and harmful compounds and leaving a non drying lubricating barrier.
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# Triflow – for surfaces that...

- Spin – Circular saws and other cutting edges stay cleaner and sharper. It may be applied direct to the blade and is particularly suitable when cutting aluminium or other metals which generate abrasive dust. Triflow adheres to the cutting edge even under high centrifugal force.
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# Application points and Benefits: Motorcycles and Bikes



- Use on chains, cables, sprockets, derailleur and hubs
- Cuts friction and wear
- Reduces build up of dirt, dust and other chain damaging abrasives

# Application Points and Benefits: Automotive



- Use on bolts, locks, hinges, latches, cables, linkages, seat tracks, winches and cranks
- Reduces friction and wear
- Breaks and helps prevent corrosion, rust and freeze-up
- Displaces dirt, grit and moisture

# Application Points and Benefits: Marine



- Use on shackles, winches, blocks, hatches, bearings, snaps, locks, hinges
- Helps protect against salt spray, rust, corrosion and freeze up
- Reduces build up of dirt, dust and other damaging abrasives
- Displaces moisture
- Reduces friction and wear

# Application Points and Benefits: Locks



- Cuts friction
- Displaces foreign particles
- Protects from ice, moisture, rust and corrosion

# Application Points and Benefits: Power Tools



- Use on control cables, starter mechanisms, blade shafts, chains, sprocket housings.
- Makes equipment work smoother, easier, quieter and longer.
- Reduces friction and wear.
- Protects against rust and corrosion.

# Conclusion: Triflow Factfile

- It is a Premium Quality product at a premium price. (For those applications where only the best is good enough).
- Technical data and specs available on [www.triflow.co.uk](http://www.triflow.co.uk)
- We make it in our “state of the art” factory in Sheffield (UK)
- Secret formula, impossible to copy
- Probably the best Maintenance Lubricant available

17  
factfile

TRI-FLOW™

www.triflow.co.uk

## Technical information

# TRI-FLOW™

VISCOSITY 15cps @ 37.78°C (100°F)

BASE MATERIAL Mineral Oil, P.T.F.E.

SURFACE TENSION 33.3 dynes/cm @ 25°C (77°F)

DIELECTRIC PROPERTIES (ASTM D -877) Dielectric Strength - 1.9 KV (19 volts/ml).

Specific Resistivity -  $19 \times 10^6$  ohm-cm @ 77°F (25°C)

Dielectric Constant - 7.81 @ 10,00 Hz @ 77°F (25°C)

Dispation Factor - 1.77 @ 10,000 Hz @ 77°F (25°C)

SPECIFIC GRAVITY 0.866 @ 20°C (68°F)

CORROSION PROTECTION Salt Spray Test (ASTM B 117) - 5% salt spray for 100 hours.

Excellent water displacing characteristics and stability.

FLASH POINT Seta (closed cup) 52°C (126°F)

FALEX LOAD TEST (ASTM D -3233) Max Load 3700 lbs Friction Coefficient 0.08

FALEX WEAR TEST (ASTM D -2670) 500 lbs/1hr; no wear (14 teeth)

4-BALL WEAR TEST (ASTM D -2266) Scar Diameter 0.8mm

4-BALL EXTREME WEAR TEST (ASTM D -2783) Load Wear Index 48.6kg Weld Point 250kg

TEMPERATURE RANGE -53°C - +246°C

Tri-Flow is produced in the United Kingdom by Ronseal Limited

It is available in:

• 200ml & 500ml Aerosols • 4 Litre Rigid Containers • 59ml Bottle

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Chapelton, Sheffield,

South Yorkshire S35 2YP, England.

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for further  
information contact:



\*Contains P.T.F.E. for enhanced lubrication

Ronseal and Tri-Flow are registered trademarks of the Sherwin-Williams Company.  
Ronseal, the manufacturer of Tri-Flow, have been assessed to ISO 9001/2000.