



# Special lubricants

for mechanical engineering

# Setral® special lubricants for mechanical engineering



## BEARINGS

### SYN-setral-CA/C2 FD (article number 030337)

Versatile high-temperature grease without solid lubricants, with extremely high wear and corrosion protection.

#### Application

- Food, beverage and pharmaceutical industry
- Slide and roller bearings
- Joints and guide ways
- Other sliding pairings under high temperatures and high loads
- E.g. bearings on rolls of corrugators

#### Characteristics

- H1 registered
- Resistant to cold and hot water, alkaline solutions etc.
- Very high wear and corrosion protection, high load carrying ability
- High adherence on metallic surfaces
- Compatible with usual plastic and sealing materials
- Free from animal ingredients
- Free from allergens
- Silicone-free

#### Technical data

Colour: light beige  
Base: semi synthetic/calcium sulfonate  
Base oil viscosity @ 40°C:  $\approx 100 \text{ mm}^2/\text{s}$   
NLGI: 2  
Temperature range: -25 up to +160°C  
Short term max. temperature: +180°C

### SYN-setral-INT/250 A-2 (article number 030315)

Fully synthetic special grease for long-term lubrication, stable at high temperature and aggressive ambience.

#### Application

- Long-term or life-time lubrication of slide and roller bearings
- All sliding pairs susceptible to wear under extreme conditions
- Lubrication of plastic/plastic and plastic/metal surfaces
- E.g. paint lines, fans, circle conveyors, film stretching machines, bearings on rolls of corrugators
- Approved by: Friatec

#### Characteristics

- High load carrying ability
- Excellent wear properties
- Extended relubrication intervals
- Extremely low evaporation rate
- Resistant against chemicals and aggressive media
- Neutral to most plastics and elastomers
- Silicone-free
- Economical in consumption

#### Technical data

Colour: white  
Base: PFPE/PTFE  
Density:  $\approx 1.9 \text{ g/cm}^3$   
Base oil viscosity @ 40°C:  $\approx 510 \text{ mm}^2/\text{s}$   
NLGI: 2  
Temperature range: -40 up to +250°C  
Short term max. temperature: +280°C

### SYN-setral-INT/250 FD-2 (article number 030397)

High-temperature grease for long-term lubrication in food and pharmaceutical industries, particularly at high-temperatures and aggressive ambience.

#### Application

- Long-term or life-time lubrication of slide and roller bearings
- All sliding pairs susceptible to wear under extreme conditions
- Lubrication of plastic/plastic and plastic/metal surfaces
- E.g. beverage filling machines, baking ovens, baking lines, guide pulleys of conveyor chains, kiln cars, calanders
- Approved by: IMO, Nordzucker, Friatec

#### Characteristics

- H1 registered
- High load carrying ability
- Excellent wear properties
- Extended relubrication intervals
- Resistant against chemicals and aggressive media
- Resistant to oxidation and ageing
- Free from animal ingredients
- Free from allergens
- Silicone-free
- Economical in consumption

#### Technical data

Colour: white  
Base: PFPE/PTFE  
Density:  $\approx 1.9 \text{ g/cm}^3$   
Base oil viscosity @ 40°C:  $\approx 500 \text{ mm}^2/\text{s}$   
NLGI: 2  
Temperature range: -40 up to +260°C  
Short term max. temperature: +280°C



## SEALS

### SI-setral-929/FD (article number 030349)

Silicone lubricating grease for fittings

#### Application

- Seals on valves and fittings
- Assembly lubricant for plastic/metal and rubber/metal pairings
- E.g. beverage filling machines, beer dispensing valves

#### Characteristics

- H1 registered
- Excellent oxidation stability
- Excellent sealing properties
- Stable to cold and hot water, steam
- Compatible with EPDM, FPM, NBR etc.
- Neutral to beer foam - if properly applied
- Agreeable odour
- Free from mineral oil

#### Technical data

Colour: white  
Base: silicone oil/thickener  
Base oil viscosity @ 40°C:  $\approx 750 \text{ mm}^2/\text{s}$   
NLGI: 2  
Temperature range: -40 up to +150°C

# CHAINS

## FLUID-setral-CH 100 (article number 070705)

Semi synthetic chain oil for highest demands and for long term lubrication

### Application

- Especially developed for chains in escalators and speed walks

### Characteristics

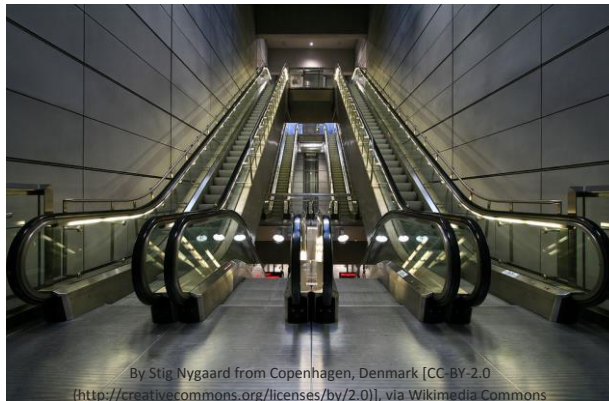
- Reduces wear and tear
- Excellent wear properties
- Excellent corrosion protection
- Extended relubrication cycles
- Miscible with standard mineral oils
- Substantial improvement of the surface quality

### Technical data

Colour: light brown  
Base: semi synthetic

Oil viscosity @ 40°C:  $\approx 100 \text{ mm}^2/\text{s}$

Temperature range: -10 up to +100°C



## FLUID-setral-STG 220 FD (article number 060672)

Fully synthetic high-temperature chain oil of the latest generation

### Application

- Transport-, drive- and cam shaft chains
- Food, beverage and pharmaceutical industry

### Characteristics

- H1 registered
- Extremely low evaporation loss
- Excellent wear properties
- Outstanding creeping and penetrating properties
- Extremely low coefficient of friction
- Very good anti-corrosion properties
- Adhesive additives prevent dripping and spining-off
- Chemically stable and ageing resistant, even in aggressive air
- High hydrolytic stability
- Silicone-free

### Technical data

Colour: yellow  
Base: mixture of synthetic oils

Oil viscosity @ 40°C:  $\approx 220 \text{ mm}^2/\text{s}$

Flash point, COC: > +300°C

Temperature range: -20 up to +260°C

## GEAR BOXES

### MI-setral-GEAR 220, 320, 460 (article numbers 070712, 070713, 070714)

Mineral oil based high-performance gear oils with selected EPL additive system

#### Application

- Highly loaded spur, bevel and worm gears
- Heavy operating conditions like shock loads, vibrations, oscillation
- Also for slide and roller bearings, highly loaded surfaces, circulating systems etc.
- E.g. extruders, calanders, kneaders, mills, industrial robots in chemical, mining, cement, automotive and plastic industry
- Meets the requirements of the specification DIN 51517-3
- Approval by FLENDER

#### Characteristics

- Outstanding wear protection by EPL additive system
- Re-smoothens damaged surfaces
- Lowers the coefficient of friction and power losses and reduces the oil sump temperature
- Reliable prevention of micropitting and pitting
- High scuffing load capacity even at low circumferential speeds and mixed friction
- Especially suitable for safe lubrication in the boundary and mixed friction
- Reliable corrosion protection for steel and nonferrous metals
- Considerably longer service life of machine components and industrial plants
- Permits longer oil change intervals by lower strain
- Free from solids and silicone

#### Technical data

Colour: brown  
Base: mineral oil

Oil viscosity @ 40°C:

215, 320 or 460 mm<sup>2</sup>/s

Load level; FZG test A/8,3/90: >12

Temperature range: -10 up to +100°C

### SYN-setral-GEAR/PGB 220, 320, 460 FD (article numbers 066002, 066003, 066004)

Fully synthetic high performance gear oil for the food and pharmaceutical industry

#### Application

- Helical, bevel, planetary and worm gears
- At high temperatures and under the influence of water
- Food, beverage and pharmaceutical industry
- Also for chains, tooth clutches, slide and roller bearings
- Meets the requirements of the specification DIN 51517-3
- Approval by FLENDER (worm, helical, bevel and planetary gear units)

#### Characteristics

- H1 conform
- High load carrying capability
- Excellent oxidation and ageing stability
- Good corrosion protection
- High thermal stability
- Excellent wear properties
- Water soluble
- Wide temperature range
- Compatible with many elastomers (especially NBR, FVMQ and FMQ)

#### Technical data

Colour: amber  
Base: polyglycol

Oil viscosity @ 40°C:

220, 320 or 460 mm<sup>2</sup>/s

Load level; FZG test A/8,3/90: >14

Temperature range: -30 up to +140°C

Short term max. temperature: +150°C



## MULTI PURPOSE / FRICTION REDUCTION

### GLIS-setral-FD (article numbers 070763, Spray: 050552)

Fully synthetic lubricating and penetrating oil for the food and pharmaceutical industry

#### Application

- Lubricate, release, preserve/protect and clean
- Food, beverage and pharmaceutical industry
- Suitable for high-grade steels and as corrosion preventive agent on metallic surfaces
- E.g. fine-mechanical drives, measuring tools, sliders, spindles, joints, fittings, chains and ropes, cylinder locks, screw connections, axial face seals etc.

#### Characteristics

- H1 registered
- Ideal temporary corrosion protection of metallic surfaces
- Excellent lubricating and passable making of mechanical elements
- Outstanding lubrication effect even at extreme temperatures below the freezing point
- Cleans oil and fat from dirty surfaces
- Removes easily fretting corrosion
- Does not contain acid or resin
- Neutral to most plastics and elastomers
- Produces a not developing protective film
- Silicone-free

#### Technical data

Colour: light yellow  
Base: synthetic oil

Oil viscosity @ 20°C: 3,1 mm<sup>2</sup>/s

Temperature range: -20 up to +80°C



### setral DISCUTOIL 1346/FD (article number 070775)

Fully synthetic lubricating oil

#### Application

- Friction pairs in the food, beverage and pharmaceutical industry
- Good for the lubrication of longitudinal cutters of cardboard machines

#### Characteristics

- H1 registered
- Resistant to ageing
- Miscible with mineral oils
- Excellent wetting properties
- Excellent wear properties
- Low friction coefficient
- Very good corrosion protection

#### Technical data

Colour: light yellow  
Base: mixture of synthetic oils

Oil viscosity @ 20°C: 16,5 mm<sup>2</sup>/s

Temperature range: -10 up to ≈ +190°C

### setral MULTI SILI (article numbers 070736, Spray: 050512)

Fast-drying lubricant fluid on silicone base

#### Application

- Rubber and plastic parts in various applications
- Food, beverage and pharmaceutical industry
- E.g. packaging and labelling machines, components in the automotive industry like safety belts, rubber seals etc.
- Good for friction reduction on stainless steel sockets of escalators

#### Characteristics

- H1 conform
- Clean application
- Protects from humidity
- Separating and lubricating agent for plastics
- For all moving parts metal on rubber
- Lubricates without greasing
- Avoids electrostatic charging
- Transparent
- Economical in consumption

#### Technical data

Colour: transparent  
Base: silicone oil

Oil viscosity @ 20°C:  $\approx 1 \text{ mm}^2/\text{s}$

Temperature range: -40 up to +150°C



## CLEANERS

### CLEAN-setral-AN/U (article number Spray 050534)

High performance cleaner and degreaser, highly effective and fast evaporating

#### Application

- Residue-free and deep cleansing and degreasing
- Ideal as degreaser prior to use of industrial glue
- Reliably removes leftover of oil, resin, wax and soiling
- E.g. bearings, machine parts, injection moulding tools

#### Characteristics

- Evaporates quickly and without residues
- Cleans quickly and efficiently
- Guarantees absolutely clean surfaces
- Significantly better cleaning efficiency compared to brake cleaners
- Economical in consumption

#### Technical data

Colour: colourless  
Base: mixture of solvents

Evaporation number: 4 (Ether = 1)

Temperature range: -40 up to +40°C

### CLEAN-setral-FD (article numbers 090925, Spray: 050554)

High-performance cleaner and degreaser, also suited for high temperatures.

#### Application

- Residue-free cleaning and degreasing pharmaceutical industry
- Use on hot surfaces possible up to approx. 80°C
- Food, beverage and pharmaceutical industry
- E.g. bearings, machine parts, injection moulding tools, engineering and plant equipment, automotive industry

#### Characteristics

- H1 registered
- Evaporates fast and without residues
- Suited for high temperatures
- Compatible with common plastic materials
- Cleans quickly and efficiently
- Guarantees absolutely clean surfaces
- Agreeable odour
- Economical in consumption

#### Technical data

Colour: colourless

Base: solvent

Evaporation number: 19 (Ether = 1)

Temperature range: -30 up to +80°C



The mentioned products are only an excerpt of our product portfolio. With more than 800 lubricants and maintenance products we offer a solution for almost every lubrication application.

Further information is available on the material data sheets. Our experts will consult you on request and find the right solution for your application.

For more than 45 years we develop special lubricants and maintenance products in close cooperation with our customers and partners for almost every application in the industry.



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