



### PRODUCT DESCRIPTION

**Vorta Grease 31 S Calcium Sulfonate Complex Grease** is a high performance “Most Extreme Pressure” grease exhibiting outstanding film strength and resistance in corrosive environments.

Contains Synthetic base oils that provide equipment longevity.

It protects against chemical and thermal degradation keeping equipment free from metal to metal contact thus controlling temperature. This process ensures the best protection under all “Most Extreme Condition” operating.

**Vorta Grease 31 S Calcium Sulfonate Complex Grease** formula and manufacturing processes have been perfected over the years to produce the best quality Calcium Sulfonate Complex Grease with outstanding performance in severe operating conditions.

We control the processes to maximize the formation of Calcite while minimizing Vaterite, providing it with outstanding pumpability characteristics.

#### Protection against tribocorrosion.

Vorta Grease 31 S high resistance water vapour up to 150 °C, and to many diluted bases and acids:

- 10% potassium lye up to 90 °C,
- 10% sulphuric acid up to 70 °C,
- 10% nitric acid up to 40 °C and
- 1% hydrochloric acid up to 40 °C.

*(Tests carried out with V2A stainless steel strips based on DIN 51 807 Pt 1.)*

*Water resistance test in an autoclave  
Water vapour 130 °C / 220 h*

*Vorta grease 31 S shows very good resistance; loss in weight approx. – 0.1%; texture unchanged.*

*As compared to this positive result a mineral oil base grease with lithium soap thickener (V40 approx. 520 mm<sup>2</sup>/s) shows a loss in weight of approx. 75% and a severe modification of texture after 24 h.*

### BENEFITS

- Calcium Sulfonate base  
Water Resistant  
“Most Extreme Pressure” properties
- High Drop Point – Suitable for high temperature application
- Excellent rust protection properties
- Excellent performance under heavy loads
- Protects equipment from rust
- Does not drip out under running conditions
- Extraordinary performance at high temperatures
- Protects equipment from rusting under humid and water ingress conditions
- Excellent pumping properties and thus recommended for centralized lubrication systems

### APPLICATIONS

**Vorta Grease 31 S Calcium Sulfonate Complex Grease** is recommended for severe applications in many industries.

It is particularly suitable for high-speed bearings and centralized lubrication systems.

◆ This grease is recommended for use in automotive as well as “Most Extreme Pressure” applications in construction, mining, agricultural, logging and hauling industries.

◆ This product is suitable anywhere where a shear stable, high load carrying, corrosion resistant grease is required.

GRADE	UNIT	GREASE 31 S
NLGI Classification		2
Thickener		Complex Calcium Sulfonate
Texture		Smooth
Drop Point	°C	310
Rusting Test	Rating	0
Work Penetration	0.1mm	290
60 strokes @ 25 °C		
4 Ball Weld Load	Kg	400
Operating Temperature	°C	190
Speed Factor (n x Dm)	°C	210
		500,000

