

ANTI-SEIZE Spray

Copper based anti-seize spray

Product Overview

ROCOL® ANTI-SEIZE Spray is a copper based anti-seize aerosol reinforced with graphite and molybdenum disulphide to further enhance its performance particularly in applications where conventional copper based anti-seize products may fail to perform.

ROCOL ANTI-SEIZE Spray is designed for use on all static fasteners and mechanisms prone to seizure. This high performance compound is ideal as an assembly and anti-seize lubricant in extreme adverse conditions where pick-up and seizure issues may be experienced.

ROCOL ANTI-SEIZE Spray is particularly suited to extreme wet conditions even when submerged in sea water environments.

ROCOL ANTI-SEIZE Spray is also available in aerosol form – see ANTI-SEIZE Compound.

Features and Benefits

- ROCOL ANTI-SEIZE Spray has an excellent static operating temperature resistance of -50°C to +1100°C.
- Non soap thickener producing non-melting anti-seize compound.
- ROCOL ANTI-SEIZE Spray prevents pick-up and seizure of static threaded fasteners.
- Lubricates, protects and eases dismantling.
- ROCOL ANTI-SEIZE Spray is effective even in the most aggressive environments and is completely insoluble in water.

Directions for Storage and Use

- Shake the aerosol well before use.
- Apply ROCOL ANTI-SEIZE Spray from a distance of 15-30 cm (6-12 inches).
- For best results apply to both the male and female parts.
- Use ROCOL ANTI-SEIZE Spray only in well ventilated areas.
- Also available as ANTI-SEIZE Compound for application as paste.
- The storage temperature should be kept below +50°C, and the storage area should be out of direct sunlight.
- Shelf life is 2 years from date of manufacture.

Typical Applications

- ROCOL ANTI-SEIZE Spray is ideal for hinges, latches and other mechanisms on furnaces, ovens and other similar equipment.
- It is also ideally suited for high temperature applications such as exhaust systems etc.
- ROCOL ANTI-SEIZE Spray can also be used for extreme conditions found in applications such as docks and oil rigs.

Pack Sizes

Pack Size	Part Code
400ml	14015

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Property	Test Method	Result
Appearance	Visual	Silvery copper coloured slightly greasy film
Base Type	N/A	Mineral oil
Thickener	N/A	Organically modified clay
Solvent	N/A	Hydrocarbon
Propellant	N/A	LPG (Hydrocarbon)
Solids	N/A	Copper, Graphite, MoS ₂ , Aluminium
Solids Content in Applied Film	N/A	Approximately 40%
Temperature Range	N/A	-50°C to +1100°C
Water Solubility	N/A	Insoluble
Coefficient of Friction	N/A	circa 0.15
Approximate Coverage	0.1mm film thickness	4m ² /400ml

Values quoted above are typical and do not constitute a specification.

Safety Data Sheets

Safety data sheets are available for download from our website www.rocol.com or may be obtained from your usual ROCOL contact.

The information in this publication is based on our experience and reports from customers. There are many factors outside our control or knowledge which affect the use and performance of our products, for which reason it is given without responsibility.

Issue: 2 Date: 10-16

T +44 (0) 113 232 2600
F +44 (0) 113 232 2740
E customer-service@rocol.com
www.rocol.com

ROCOL House, Swillington, Leeds LS26 8BS

Registered Company No. 559693 VAT No. 742 0531 67
Registered Office: Admiral House, St Leonard's Road, Windsor, Berkshire SL4 3BL

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Torque Setting for Fasteners

When a thread compound is applied to a fastener that will be torque tightened, the torque setting will require adjustment to achieve the correct tension in the fastener. Correct torque settings can be calculated using the methods below.

The following parameters were derived from the tension-torsion relationship measured on M12 x 50mm setscrews with 1.75mm thread pitch, full nut and Form A washers. Fasteners were degreased and a thin layer of thread compound applied in line with instructions on Page 1. Data are for fasteners at 90% of the yield stress:

Fastener Material	Coefficient of Friction (μ)	K-Factor
8.8 Steel Plain Finish	0.104	0.14
8.8 Steel BZP	0.085	0.12
8.8 Steel Hot Dip Galvanised	0.104	0.14
304 Stainless Steel	0.112	0.15
Aluminium 6061	0.093	0.13

$$T = F \times \left[(0.159 \times P) + (0.577 \times d \times \mu) + (D_f \times \frac{\mu}{2}) \right]$$

T = Torque Applied (Nm)
 F = Tension Generated in Fastener (N)
 P = Thread Pitch (m)
 d = Pitch Diameter (m)
 D_f = Nut Friction Diameter (m)
 μ = Coefficient of Friction

$$T = K \times F \times D$$

T = Torque Applied (Nm)
 F = Tension Generated in Fastener (N)
 D = Nut Nominal Bolt Diameter (m)
 K = K-Factor

Many parameters affect the tension-torsion relationship of fasteners, including: Bolt geometry, surface finish, lubricant application method, joint material, torque application method, variation in fastener manufacture etc. Therefore, these parameters above are for guidance only, especially if a different material is used or if geometry is significantly different to M12. Any calculated values are a predictive tool and the final tension should be verified, especially in critical applications. These values do not constitute a specification.

For further guidance, please speak to your usual ROCOL contact or technical.lubricants@rocol.com.