Technical Datasheet

Performance you can trust

ANTI-SEIZE 797

Nickel based anti-seize paste specially formulated for nimonic and stainless steel

Applications

ROCOL® ANTI-SEIZE 797 is a nickel based anti-seize paste specifically designed for nimonic, stainless and silver coated fasteners particularly those subjected to high temperatures for long periods in the aerospace and power generation industries.

ROCOL ANTI-SEIZE 797 is designed for use as an assembly and anti-seize lubricant to prevent pick-up and seizure even in extreme environmental conditions.

ROCOL ANTI-SEIZE 797 does not contain copper and exhibits extremely low sulphur and chlorine levels making it ideal for use on exotic alloys often found in the aerospace and other associated industries.

For a nickel-free version of ROCOL ANTI-SEIZE 797 see ANTI-SEIZE SA 610 or ANTI-SEIZE Stainless

Features and Benefits

- Excellent temperature resistance -40°C to +1000°C.
- Provides even torque loads and prevents galling and pick-up on assembly.
- Protects against wet conditions and chemical attack even in the most aggressive environments.
- Excellent anti-seize properties over extended periods at high temperatures.
- Contains extremely low levels of chlorine and sulphur.
- Nuclear grade – high purity.
- Lubricates, protects and eases dismantling.

Typical Applications

ROCOL ANTI-SEIZE 797 is primarily intended for use on stainless and nimonic alloys found in demanding applications in industries such as:

- Aerospace
- Automotive
- Power generation

Usage Guidance

- Apply ROCOL ANTI-SEIZE 797 as a thin film by brushing or wiping onto a clean dry surface.
- Apply to the thread, nut/bolt bearing faces and washers (if used).

Storage Guidance

- The storage temperature should be controlled between +1°C and +40°C.
- Shelf life is 5 years from date of manufacture.

Approvals and Certifications

- Rolls Royce MSRR 9380
- Rolls Royce OMAT 4/56
- DTD 900/6128 / AFS 1925
- NATO stock No 8030 99 007-9949

Pack Sizes

Part Code	Pack Size
16403	500g

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

www.rocol.com

bsi ISO 9001 Quality Management Systems CERTIFIED | AS/EN 9100 Aviation Space and Defence CERTIFIED | ISO 14001 Environmental Management CERTIFIED | ISO/IEC 27001 Information Security Management CERTIFIED | ISO 45001 Occupational Health and Safety Management CERTIFIED

ROCOL A Division of ITW Limited
ROCOL House, Swillington, Leeds, LS26 8BS, UK
VAT Number: 742053167
Registered Company No: 00559693
Registered Office: Saxon House, 2-4 Victoria Street, Windsor, England, SL4 1EN

Technical Datasheet

Performance you can trust

ANTI-SEIZE 797

Nickel based anti-seize paste specially formulated for nimonic and stainless steel

Parameter	Test Method	Value
Appearance	Visual	Stiff black paste
Carrier	N/A	Petroleum Jelly
Solids	N/A	Nickel, graphite
Solids Content	N/A	33%
Consistency	N/A	NLGI No.3
Break Loose Torque	1000 hours at 610˚C	78.4Nm
Sulphur & Chlorine Levels	N/A	Controlled to below 200ppm
Temperature Range	N/A	-40˚C to +1000˚C
Approximate Coverage	0.1mm film thickness	10m^2/kg

Safety Datasheets

These are available at https://www.rocol.com/datasheets. For further assistance, please contact us via the ROCOL website or using the details below.

Note

The information in this Technical Datasheet is informed by our experience and feedback from industry. There are many variables outside our control or knowledge which affect the use and performance of our products, for which reason it is given without responsibility. Values quoted are typical and do not constitute a specification.

If you'd like to discuss the suitability of any ROCOL solution for your system, please get in touch.

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

www.rocol.com

ROCOL A Division of ITW Limited
ROCOL House, Swillington, Leeds, LS26 8BS, UK
VAT Number: 742053167
Registered Company No: 00559693
Registered Office: Saxon House, 2-4 Victoria Street, Windsor, England, SL4 1EN

Technical Datasheet

Performance you can trust

ANTI-SEIZE 797

Nickel based anti-seize paste specially formulated for nimonic and stainless steel

Torque Setting for Threaded 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 to threads, nut face and washers. Data are for fasteners at 90% rated yield stress:

Fastener Material	Coefficient of Friction (μ)	K-Factor
A2-70 Stainless Steel	0.135	0.18
8.8 Steel Plain Finish	0.077	0.11
8.8 Steel BZP	0.056	0.09
Aluminium 6061	0.058	0.09
Aluminium 7075	0.067	0.10
Ti6Al4V Bolt / Alu 7075 Nut & Washer	0.059	0.09
Inconel 718 (Silver Coated Nut) *	0.081	0.12

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

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.
*This value represents 75% of the yield strength at 550°C, a typical application temperature.
For further guidance, please speak to your usual ROCOL contact or technical.lubricants@rocol.com.

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

www.rocol.com

ROCOL A Division of ITW Limited
ROCOL House, Swillington, Leeds, LS26 8BS, UK
VAT Number: 742053167
Registered Company No: 00559693
Registered Office: Saxon House, 2-4 Victoria Street, Windsor, England, SL4 1EN

Revision Date: 0126 Template: 2507