ANTI-SEIZE 797

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

Product Overview

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 Stainless (formerly known as ASC251T).

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.

Directions for Storage and Use

- Apply ROCOL ANTI-SEIZE 797 as a thin film by brushing or wiping onto a clean dry surface.
- For best results apply ROCOL Anti-Seize 797 to both the male and female parts.
- The storage temperature should be controlled between +1°C and +40°C.

Shelf life is 5 years from date of manufacture.

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

Specifications

ROCOL ANTI-SEIZE 797 has been developed for specialist applications and has the following specifications:

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

Pack Sizes

Pack Size	Part Code
500g	**16403**

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BS EN ISO 9001 Certificate No. FM 12448
BS EN ISO 14001 Certificate No. EMS 67596
OHSAS 18001 Certificate No. OHS 78173

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Technical Data

Performance you can trust

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Property	Test Method	Result
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**
Coefficient of Friction	**N/A**	**0.086**
Approximate Coverage	**0.1mm film thickness**	**10m²/kg**

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.

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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
304 Stainless Steel	0.135	0.18
8.8 Steel Plain Finish	0.077	0.11
8.8 Steel BZP	0.056	0.09
8.8 Steel Hot Dip Galvanised	0.094	0.13
Aluminium 6061	0.058	0.09
Aluminium 7075	0.067	0.10
Ti6Al4V Bolt / Alu 7075 Nut & Washer	0.059	0.09

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

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.

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