ANTI-SEIZE Stainless

Anti-seize paste specially formulated for nimonic and stainless steel

Product Overview

ROCOL® ANTI-SEIZE Stainless is a nickel-free 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.

It 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 Stainless 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.

ANTI-SEIZE Stainless was 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.

- Lubricates, protects and eases dismantling.

- Suitable for use with aluminium and its alloys.

Directions for Storage and Use

- Apply as a thin film by brushing or wiping onto a clean dry surface.

- For best results apply to both male & female parts

- The storage temperature should be controlled between +1°C and +40°C.

- Shelf life is 5 years from date of manufacture.

- Using calcium containing materials >300°C is restricted in some industries, particularly combined cycle gas turbines (CCGT). If this affects your system, please speak to our technical department at: technical.lubricants@rocol.com. Anti-Seize SA 610 is optimized for these systems.

Specifications

- Rolls Royce MSRR 4008

- Rolls Royce OMAT 4/62

- Rolls Royce OMAT 10123 (spec for V2500)

- Rolls Royce COMAT 10-110

- Naval Cat No.:
    - 0475-179-9539

- NATO Stock No.:
    - 8030-99-179-9539

- BAE Systems approved for high nickel alloys

Pack Sizes

Pack Size	Part Code
500g	14143

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Property	Test Method	Result
Appearance	Visual	Stiff black paste
Carrier	N/A	Synthetic hydrocarbon
Solids	N/A	Graphite, Inorganic compound
Temperature Range	N/A	-40°C to +1000°C
Approximate Coverage	0.1mm film thickness	10m^2/kg
Independent Study on A286 Silver Coated Nut and Bolt		
Tightening Torque	-	11.5Nm
Break Loose Torque	100 hours at 1000°C	20.2Nm
Coefficient of Friction	-	0.085

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.
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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	0.157	0.20
8.8 Steel Plain Finish	0.162	0.21
8.8 Steel BZP	0.106	0.15
8.8 Steel Hot Dip Galvanised	0.122	0.16
Aluminium 6061	0.149	0.19
Aluminium 7075	0.143	0.19
Ti6Al4V Bolt / Alu 7075 Nut & Washer	0.136	0.18

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

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.