



The Non-Corrosive Nature of Extreme Simple Green®

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Let us first be very clear about what we mean by the non-corrosive “nature” of Extreme Simple Green. Extreme Simple Green does NOT contain corrosion or rust inhibitors in the typical sense of the word. Products that contain residual corrosion/rust inhibitors coat the surface of the metal to provide a barrier against the things that cause corrosion . . . oxygen and moisture.

Instead, there is an ingredient in Extreme Simple Green that prevents corrosion below the fluid level. That special ingredient is a silicate mineral (not to be confused with silicone). At dilutions up to 1 part Extreme to 13 parts of de-ionized or distilled water, aluminum and steel do not corrode below the fluid line when soaked for extended time periods. (See AMS 1526B Immersion Corrosion test results at 1:9, 1:11, and 1:13. The first faint signs of discoloration were seen at 1:15.)

There are two major benefits imparted by this corrosion-inhibiting characteristic of silicate: (1) a silicate is a safer chemical to the user and the environment when compared to traditional corrosion inhibitor chemicals, and (2) economical dilutions of Extreme can be used along with lengthy contact/soak times to more thoroughly clean metals without fear of corrosion.

However, because Extreme Simple Green is free-rinsing and does not leave behind any sort of “inhibiting properties” on cleaned metals, further protection of cleaned metals might be necessary in some circumstances. Air and humidity attack metals and begin nature’s process of rusting and/or oxidizing, unless the metals are immediately protected via plating, painting, coating – or by having a temporary corrosion or rust inhibitor applied to them (which is meant to be removed within a short time period). For example, a metal automotive part that has been purposely coated with grease (a practice which serves to block oxygen and moisture to eliminate corrosion during transport or storage), can later be cleaned off with Extreme and then treated with a temporary water-displacement protective film if the part is not going back into service immediately.

Do understand, however, that it is a beneficial characteristic that Extreme Simple Green rinses residue-free, leaving behind nothing whatsoever, including the corrosion-inhibiting properties of the silicate. Therefore, when rinsing Extreme Simple Green, NO residues remain that could interfere with further processing, such as plating, painting, powder coating, etc.

Thank you for reviewing this information, and for considering Extreme Simple Green as a solution to your cleaning needs. If you have questions about this information, please contact your Simple Green representative or our technical staff:

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Ante todo, vamos a intentar esclarecer acerca de lo que queremos decir con la "naturaleza" no corrosiva de Extreme Simple Green. Simple Green Extreme no contiene inhibidores de corrosión u oxidación en el sentido típico de la palabra. Los productos que contienen corrosión residual / oxidación actúan como inhibidores en la capa de la superficie del metal para proporcionar una barrera contra las cosas que causan la corrosión. . . oxígeno y la humedad.

En su lugar, hay un ingrediente en Simple Green Extreme que evita la corrosión por debajo del Nivel del líquido. Ese ingrediente especial es un mineral de silicato (que no debe confundirse con silicón). A diluciones de hasta 1:13 en agua desionizada o destilada, aluminio y acero no se corroen por debajo de la línea de fluido cuando se remojan durante periodos de tiempo prolongados. (Ver AMS 1526B resultados inmersión de prueba de corrosión en 1:9, 1:11, y 1:13. Las primeras señales débiles de decoloración se observaron a las 1:15.)

Hay dos ventajas principales impartidas por esta característica inhibidora de la corrosión de silicato: (1) un silicato es un producto químico seguro para el usuario y el medio ambiente en comparación con los tradicionales productos químicos inhibidores de la corrosión, y (2) diluciones reducidas de Extreme, pueden ser utilizadas junto con el contacto prolongado / tiempos de inmersión a los metales más a fondo limpio sin miedo de la corrosión.

Sin embargo, como Simple Green Extreme es libre de enjuague y no deja ningún tipo de "propiedades" en la inhibición de metales limpios, una mayor protección de los metales podría ser limpiándolos si fuese necesario en determinadas circunstancias. Aire y humedad atacan los metales y comienza el proceso de oxidación natural, a menos que los metales están inmediatamente protegidos a través de algún recubrimiento, pintura, revestimiento - o darles un baño temporal con algún anticorrosivo o inhibidor de la oxidación aplicado a ellos (el que está destinado a ser eliminado dentro de un corto período de tiempo). Por ejemplo, un pieza de metal del sector automotriz que ha sido deliberadamente revestido con grasa (una práctica que sirve para bloquear oxígeno y humedad para eliminar la corrosión durante el transporte o el almacenamiento), después puede ser limpiado con Extreme y luego tratado con una película protectora temporal (de propiedades de separación y desplazamiento de agua), si la parte no va a volver en servicio inmediatamente.

Sin embargo, es importante comprender que se trata de una característica beneficiosa que Simple Green Extreme se enjuaga sin dejar residuos, dejando tras de sí ningún tipo de químicos, incluyendo el inhibidor de la corrosión propiedades del silicato. Por lo tanto, cuando enjuague Simple Green Extreme, no quedarán residuos que podrían interferir con procesos de producción adicionales, tal como el revestimiento, pintura, polvo, recubrimiento, etc

Gracias por leer esta información, y para considerar Extreme Simple Green como una solución a sus necesidades de limpieza.

The logo for Simple Green, featuring the words "simple" and "green" in a stylized, rounded, green font. The "s" in "simple" is lowercase and the "g" in "green" is lowercase. A registered trademark symbol (®) is located to the right of the word "green".

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SMI, Inc.

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Attn: Carol Chapin
Simple Green
15922 Pacific Coast Highway
Huntington Harbour, CA 92649

Date: 13-Sep-2005
SMI/REF: 05AUG784

Product: **Extreme Simple Green** (received 08-Aug-2005)
Dilution: (1:9) 10%

Partial testing in accordance with:
AMS 1526B
Cleaner for Aircraft Exterior Surfaces
Water-Miscible, Pressure-Spraying Type

3.2.1.2 Total Immersion Corrosion: The product shall neither show evidence of corrosion of the panels nor cause a weight change of any test panel greater than the following, determined in accordance with ASTM F 483:

PANEL	Allowable Weight Change mg/cm ² /24hrs	RESULTS
		DILUTE 1:9 (10%)
AMS 4037 anodized per AMS 2470	0.3	0.01
AMS 4041 Aluminum Alloy	0.3	0.01
AMS 4049 Aluminum Alloy	0.3	0.01
AMS 4376 Mg dichromated AMS 2475	0.2	0.05
AMS 4911 Titanium Alloy	0.1	0.02
AMS 5045 Carbon Steel	0.8	0.01

Result Conforms

Respectfully submitted,



Patricia D. Viani, SMI Inc.

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Date: 13-Sep-2005

SMI/REF: 05AUG784

Product: **Extreme Simple Green** (received 08-Aug-2005)
Dilution: (1:11) 8.33%

Partial testing in accordance with:
AMS 1526B
Cleaner for Aircraft Exterior Surfaces
Water-Miscible, Pressure-Spraying Type

3.2.1.2 Total Immersion Corrosion: The product shall neither show evidence of corrosion of the panels nor cause a weight change of any test panel greater than the following, determined in accordance with ASTM F 483:

PANEL	Allowable Weight Change mg/cm ² /24hrs	RESULTS
		DILUTE 1:11 (8.33%)
AMS 4037 anodized per AMS 2470	0.3	+0.05
AMS 4041 Aluminum Alloy	0.3	0.01
AMS 4049 Aluminum Alloy	0.3	0.01
AMS 4376 Mg dichromated AMS 2475	0.2	0.01
AMS 4911 Titanium Alloy	0.1	0.01
AMS 5045 Carbon Steel	0.8	0.01

Result Conforms

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Date: 13-Sep-2005

SMI/REF: 05AUG784

Product: **Extreme Simple Green** (received 08-Aug-2005)
Dilution: (1:13) 7.14%


Partial testing in accordance with:
AMS 1526B
Cleaner for Aircraft Exterior Surfaces
Water-Miscible, Pressure-Spraying Type

3.2.1.2 Total Immersion Corrosion: The product shall neither show evidence of corrosion of the panels nor cause a weight change of any test panel greater than the following, determined in accordance with ASTM F 483:

PANEL	Allowable Weight Change mg/cm ² /24hrs	RESULTS
		DILUTE 1:13 (7.14%)
AMS 4037 anodized per AMS 2470	0.3	0.01
AMS 4041 Aluminum Alloy	0.3	0.01
AMS 4049 Aluminum Alloy	0.3	0.01
AMS 4376 Mg dichromated AMS 2475	0.2	0.02
AMS 4911 Titanium Alloy	0.1	0.01
AMS 5045 Carbon Steel	0.8	0.01

Result Conforms

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