

Certificate of Conformance SIFCO Process Solution

The solution identified below has been tested under controlled conditions and found to meet SIFCO Applied Surface Concepts specifications and Quality Assurance standards. This product does not contain, nor has it been contaminated with metallic mercury or mercury compounds. SIFCO ASC, LLC is a mercury free facility.

This product is free from all foreign materials that could result in foreign object damage to the equipment or process.

Capability of Meeting Specifications

SIFCO Process electroplates, when properly selected and applied, will meet the requirements of: AMS2451/10B, ASTM F519, MIL-STD-2197A (SH) and MIL-STD-865E.

| Product Code | 5034 | |
|------------------------|---|------------|
| Product Description | Tin Zinc | |
| Batch Number | 2201015 | |
| Test Requirement | Actual Value | |
| рН | 8.88 | @ 20°C |
| Specific Gravity | 1.197 | @ 20°C |
| Metal Content | 17.70 Zn 33.84 Sn | g/L g/L |
| Hydrogen Embrittlement | CONFORMS | |
| 200 Hour Fracture Test | Pass AMS 2451/10 Report Number: 22-73128 | |
| Solution Appearance | Colorless to Pale Yellow | |
| Date of Manufacture | January 21, 2022 | |
| Date of Expiration | January 21, 2024 | |
| - | | |

Quality Technician 02/08/2022

Date

F 7.5.1-2

Revision 6

7/22/2013



Phone: 940-648-5828 OmegaResearchInc.com

"Specialists in Embrittlement Testing"

Date:

February 07 2022

To:

SIFCO OH

5708 Schaaf Road

INDEPENDENCE, OH 44131

Test Report:

22-73128

Reference P.O.:

PO00008295

Test:

NOTCH TENSILE HYDROGEN EMBRITTLEMENT

Sample Identification:

SAMPLES A, B, C, D:

Job / SN:

SOLUTION CODE 5034, BATCH 2201015

Process:

BRUSH TIN ZINC PLATE

PO Specification:

AMS 2451/10B, ASTM F519 1A1

Test Method Scope:

ASTM F519-18

Receive Date:

Jan 28, 2022

Test Start Date:

Jan 28, 2022

Test End Date:

Feb 05, 2022

Sample Lot:

82G

Mfg.: GREEN

Notched Ultimate Tensile Load:

9244

Units: LBS

Test Load:

6933

Units LBS

Results:

Conforms

The above identified notched tensile samples were subjected to a 200-hour sustained load test at a load of 75% of the Notch Ultimate Tensile Load (NUTL). Results above are applicable to submitted purchase order specifications. Additionally, results apply to the samples as received. Variances as applicable are noted at bottom right of report:

Report Revision:

Revision Description:

1

1 - Original

APPRUVEU

AND 2/8/2021

Testing performed under direct supervision of approved signatories per QM_001 ISO 17025 Quality Manual PARA 7.8.

Jeremy Riley

Joshua Cóx

Clint Williams

Ops Mgr

Quality Mgr ZEngr Tech

Decision Rule: Per previously communicated and agreed data has been supplied/reported as observed without accounting for measurement uncertainty.

Report invalid unless color seal present. Page 1 of 1

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Mechanical, Metallurgical &
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