

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	2203016
Test Requirement	Actual Value
pH	8.91 @ 20°C
Specific Gravity	1.195 @ 20°C
Metal Content	17.18 Zn g/L 33.16 Sn g/L
Hydrogen Embrittlement	CONFORMS
200 Hour Fracture Test	Pass AMS 2451/10 Report Number: 22-73546
Solution Appearance	Colorless to Pale Yellow
Date of Manufacture	March 4, 2022
Date of Expiration	March 4, 2023



Quality Technician

03/21/2022

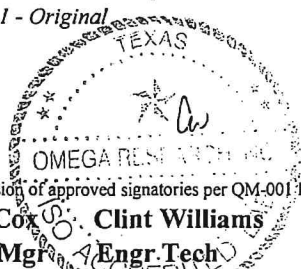
Date

"Specialists in Embrittlement Testing"

Date: March 18 2022
To: SIFCO OH
5708 Schaaf Road
INDEPENDENCE, OH 44131
Test Report: 22-73546
Reference P.O.: PO00008436
Test: NOTCH TENSILE HYDROGEN EMBRITTLEMENT
Sample Identification: SAMPLES A, B, C, D:
Job / SN: SOLUTION 5034 BATCH 2203016
Process: BRUSH TIN ZINC PLATE
PO Specification: AMS 2451/I0B, ASTM F519 1A1
Test Method Scope: ASTM F519-18
Receive Date: Mar 09, 2022
Test Start Date: Mar 09, 2022
Test End Date: Mar 18, 2022
Sample Lot: 12H **Mfg.:** GREEN
Notched Ultimate Tensile Load: 9370 **Units:** LBS
Test Load: 7028 **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: 1
Revision Description: 1 - Original



APPROVED
SMTA 3/21/2022

Testing performed under direct supervision of approved signatories per QM-001 ISO 17025 Quality Manual PARA 7.8.

Jeremy Riley **Joshua Cox** **Clint Williams**
Ops Mgr **Quality Mgr** **Engr. 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