McMASTER-CARR®

Certificate

330-995-5500
330-995-9600 (fax)
cle.sales@mcmaster.com

Purchase Order	Order Date	Placed By	McMaster-Carr Number	Number of Certificates
P1562512	1/30/2026	Jonathan Wood	1980035-01	1

Line		Product	Ordered	Status	Certificate
3	90231A119	Brass SAE Washer for 1/4" Screw Size, 0.281" ID, 5/8" OD	6 packs	6 packs deliver February 2	310–3210

Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

CERTIFICATE OF TEST

Customer: COPPER & BRASS SALES
279 JENCKES HILL RD
SMITHFIELD, RI 02917

Customer Part No: CUFLR00881 13.25 HALF PIW

Description: C26000 .062 H020

Specification: ASTM B 36/B36M-18
Customer PO No: 5520234206
PMX Order No: 136563-7
PMX Bill of Lading: 00325899
Pallet | Tag No.: 895274 | PAF15C-A2

Chemical Composition (Wt %) **Test Date** 11/18/23 **Method** (See below**)

Element	Fe	Pb	Zn	Cu
Spec Min.	0.0000	0.0000	28.0800	68.5000
Spec Max.	0.0500	0.0500	31.5000	71.5000
Actual	0.0147	0.0010	30.0395	69.9218

Dimensions	Units/Scale	Spec. Min.	Spec. Max.	Actual
Thickness	In	.06075	.06325	.0619
Width	In	13.234	13.266	PASS

Mechanical Properties **Test Date** 12/14/23

		Method	Units/Scale	Spec. Min.	Spec. Max.	Actual
Tensile Strength		ASTM-E8-21	ksi	57.0	67.0	61.4
Yield Strength	(REF)	ASTM-E8-21	ksi	NA	NA	47.4
Elongation	(REF)	ASTM-E8-21	%	NA	NA	30
Hardness 1	(REF)	ASTM-E18-20	HRB	NA	NA	70
Hardness 2						
Grain Size			mm			

Other Tests	Test Date / Method	Units/Scale	Spec. Min.	Spec. Max.	Actual

We certify that these test results were obtained from samples of the material lots identified above. The test procedures and material production conform to chemical and mechanical requirements of applicable customer and ASTM specifications. This document may not be reproduced, except in full, without the written approval of PMX Industries, Inc. **Chemistry is analyzed according to methods ASTM-E1621 and/or ASTM-E-1251. Country of Melt and MFG:USA

Mary Pasker
Mary Pasker - Laboratory Supervisor

12/19/23
Date

PMX INDUSTRIES, INC. 5300 WILLOW CREEK DRIVE SW, CEDAR RAPIDS, IA 52404-4303
TEL: 319/368-7700 FAX: 319/368-7701 E-MAIL: Mary.Pasker@ipmx.com
ISO 9001:2015 REGISTERED

Revision: 1

From: ThyssenKrupp Materials NA
Cust. SUPERIOR WASHER & GASKET Del.: 2409827279
CstAr CstOr NY052939-4
Wgt.: 559 LB Date 01/03/2024

Tomas Sanchez

3.000 x .062