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
P1552006	9/26/2025	Jonathan Wood	4292669-02	1

Line		Product	Ordered	Status	Certificate
2	8313K22	Formable Easy-to-Machine 353 Brass Rod, 7/16" Diameter, 3 Feet Long	1 each	1 each delivers September 29	230–1708

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

CERTIFIED TEST REPORT

Trip No. 302207 **Bill of Lading:** 228626 **Packing Slip:** 3698291 **Ship Date:** 04/17/2023

Customer No. 01293

Bill To
COPPER & BRASS SALES
PO BOX 5116
SOUTHFIELD , MI 48086-5116

Ship to
COPPER & BRASS SALES
13338 ORDEN DR., BLDG H
SANTA FE SPRINGS , CA 90670

84

IN-PROCESS OR FINISHED PRODUCT SAMPLES, AS INDICATED BELOW, HAVE BEEN ANALYZED AND TESTED AND FOUND TO CONFORM TO THE CHEMICAL/MECHANICAL/ PHYSICAL REQUIREMENTS OF THE APPLICABLE ASTM MATERIAL SPECIFICATION AND TO THE GENERAL REQUIREMENTS OF ASTM B249 (UNLESS OTHERWISE NOTED) WITH THE FOLLOWING RESULTS:

Copper	Lead	Iron	TOE	Zinc
ASTM B453/B453M-19				
61.0-63.0%	1.5-2.3%	0.15%max	0.50%max	Balance

Order Traceability No	Product	Specification No	Customer PO	Quantity	Item No Custom Item No.
287697.1.1	C35300 ALLOY H02 HALF HARD		5400657316	2996	0437RD12-006 CURD01419

Yield (KSI)	**Tensile** (KSI)	**Elongation** (%)	**Rockwell B** (MID. RAD.)
35.4	60.3	22	77

Copper	Lead	Iron	TOE	Zinc
62.91	1.58	0.05	0.09	Balance

Certified Mercury Free Material
ISO9001 Certified Quality System
Certificate Number: US014564-1 (Bureau Veritas Certification)
Material is Directive 2000/53/EC Compliant
Material is Directive 2002/95/EC (RoHS) Compliant
Material is Directive 2011/65/EU (RoHS2) Compliant
Material is Directive 2015/863/EU (RoHS3) Compliant
This test report meets the guidelines of EN 10204 3.1

Melted and manufactured in the USA
Wieland Chase produced rod: NAFTA - Yes

We hereby certify that the foregoing data is a true copy of the data furnished us by the producing mill or the data resulting from tests performed in the

Wieland Chase, LLC LABORATORY.

Wieland Chase, LLC
14212 Selwyn Drive
Montpelier, Ohio 43543

By _____
Jack A. Horner
Quality Manager

⚠ **WARNING:** This product can expose you to chemicals including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warning.ca.gov.

~~The recording of false, fictitous, or fradulent statement or entries on this document may be a punishable of~~fense under federal and state law

From: ThyssenKrupp Materials NA
Cust. MCMASTER-CARR SUPPLY CO Del.: 2409812343
CstAr 7520 CstOr UH-52887070
Wgt.: 20 LB Date 12/19/2023