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## **Product: 304 Stainless Steel Labels**



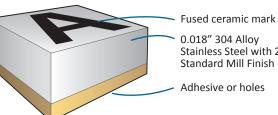
### **Product Features**

- Designed for durability in chemical, textile, petroleum and food processing environments.
- Meets MIL-STD-130 Requirements.
- Highly readable crisp black graphics on stainless steel background.
- High-performance adhesives and/or holes for mechanical attachment.

# Need a Durable Stainless Steel Label for Highly Caustic Industrial Applications?

#### Description

Camcode's 304 Alloy Stainless Steel Industrial Bar Code Label is the ideal solution for applications in chemical, textile, petroleum and food processing environments, or those applications requiring resistance to frequent cleaning with strong caustics. It is also recommended for UID labels required to meet MIL-STD-130. This label is constructed of ceramic-marked 304 Stainless Steel (thickness of .018"), with a 2B standard mill finish. The high contrast mark on the 304



0.018" 304 Alloy Stainless Steel with 2B Standard Mill Finish

Adhesive or holes

Stainless Steel is created from ceramic-like material that is thermally fused to a high quality 304 stainless steel plate. Though the finish may have irregularities and is prone to scratching, the bar code performance will not be affected. The mark will be as durable as the stainless steel itself. High-performance permanent pressure-sensitive adhesive and/or holes for mechanical attachment are available. Camcode's 304 Stainless Steel label will remain readable after exposure in harsh environments, and has excellent resistance to chemicals, caustics, solvents, salt and intermittent heat up to 700° F. Expected exterior life is 20+ years.

#### **Product Specifications**

Material	Ceramic-marked 304 Alloy Stainless Steel (thickness of 0.018") with a 2B standard mill finish.	
Attachment	Permanent pressure-sensitive adhesive and/or holes for mechanical attachment.	
Label Copy	Several font types are available as well as logos or other design elements.	
Symbologies	gies All common symbologies available including code 3 of 9, I 2 of 5, 128 and Data Matrix.	
Colors	Black graphics on stainless steel background.	
Standard Sizes	Standard and custom sizes available.	
Packaging	Packaging Shipped in sequential order, in rolls, in boxes. 100% no missing numbers.	
Shipment	15 working days from receipt of order and approval of artwork. Expedited shipment is available for an additional charge.	



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# 304 Stainless Steel Labels

### **Durability Characteristics**

Product Data	Value	Test Method
Physical Properties		
Label Material	304 Stainless Steel	ASTM A240, ASTM A666
Finish	2B Mill Finish	
Thickness, in. (mm)	0.018" (0.46mm) +/-10%	
Marking Material	Mixed Metal Oxide	
Typical Chemical Resistance		
Organic Solvents	No effect	168 hour exposure at ambient
Gasoline	No effect	temperature.
Motor Oil	No effect	
Sulfuric Acid (conc.)	No effect	
Acetic Acid (99.5%)	No effect	
Hydrogen Peroxide (30%)	No effect	
Sodium Hydroxide (25%)	No effect	
Ammonium Hydroxide (20%)	No effect	
Expected Exterior Life	20+ years	
Heat Resistance	Intermittent Heat to 700°F for adhesive attachment.	Common austenitic stainless steels, such as 304, will exhibit discoloration at elevated temperatures, which is affected by both the temperature level and the duration of exposure. The 304 Stainless Label has been heated in a propane flame until cherry red and while the metal exhibited the characteristic discoloration, the mark was unaffected.
Corrosion Resistance	The 304 Stainless Label exhibits excellent resistance to atmospheric and other mild types of corrosion. Prolonged exposure to water containing an excess of 100 ppm chlorides should be avoided.	
Attachment	The 304 <u>Stainless Steel Label</u> can readily be attached with a wide variety of adhesives or mechanical fasteners. If required by design, labels may be welded. Grade 304 stainless steel is generally considered weldable by common fusion and resistance techniques. Special consideration is required to avoid weld "hot cracking" by assuring formation of ferrite in the weld deposit. When weld filler is needed, AWS E/ER 308, 308L or 347 are most often specified. Obtain more information on 304 through reference literature.	

Note: Users must test products in the specific environment anticipated. Camcode does not warrant performance of its materials in any environment.



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