

# Eureka Welding Alloys

2000 E. Avis Drive

Madison Heights, MI 48071

Phone: 248-588-0001 Fax: 248-585-7711 Toll Free: 800-962-8560

E-mail: [info@eurekaweldingalloys.com](mailto:info@eurekaweldingalloys.com) Website: [www.eurekaweldingalloys.com](http://www.eurekaweldingalloys.com)

## TECHNICAL DATA FOR EUREKA 74 TIG RODS

**Dated:** March 31, 1995

**Revised:** July 8, 2013

## INTRODUCTION

**Eureka 74 TIG Rods** are drawn, straightened, cut to length, and then cleaned and packaged to obtain microscopically clean weld deposits. These rods are designed for the most critical applications where weld metal cleanliness is most important.

## METALLURGICAL CHARACTERISTICS

**Eureka 74 TIG Rods** is a AISI type S-7 shock resisting tool steel alloy. The as welded hardness of the deposits will typically be 55–60 HRC which can be tempered to lower hardness when necessary. This alloy works well in cutting or shearing environments at room temperature due to its unique ability of having high strength and being tough.

## RECOMMENDED APPLICATIONS

**Eureka 74 TIG Rods** are recommended for welding A.I.S.I. S-7 tool steel, however, because its weld deposits can be tempered to various hardness values, it can also be used to repair other shock-resisting grades plus many types of water-hardening tool steel. Eureka 74 work exceptionally well on metal stamping blank trim and pierce dies where edge chipping causes burr on parts. Eureka 74 is an ideal electrode for building cutting edges on composite cold and hot trim sections and punches.

# *Eureka Welding Alloys*

2000 E. Avis Drive

Madison Heights, MI 48071

Phone: 248-588-0001 Fax: 248-585-7711 Toll Free: 800-962-8560

E-mail: [info@eurekaweldingalloys.com](mailto:info@eurekaweldingalloys.com) Website: [www.eurekaweldingalloys.com](http://www.eurekaweldingalloys.com)

## **RECOMMENDED SHIELDING GASES**

**100% Argon**

## **GAS FLOW RATE**

**20-40 CFH**

## **TYPICAL CHEMISTRY**

C	Mn	Si	Cr	Mo	V
.50	.50	.60	3.3	1.5	.25

## **PHYSICAL AND OR MECHANICAL PROPERTIES**

### **AS WELDED HARDNESS**

**55-60 HRC**

# Eureka Welding Alloys

2000 E. Avis Drive

Madison Heights, MI 48071

Phone: 248-588-0001 Fax: 248-585-7711 Toll Free: 800-962-8560

E-mail: [info@eurekaweldingalloys.com](mailto:info@eurekaweldingalloys.com) Website: [www.eurekaweldingalloys.com](http://www.eurekaweldingalloys.com)

## TEMPERING DATA

The tempering data is to be used as a guide. Your results may differ due to the many variables in the utilization of this product.

### SINGLE TEMPER CURVE EUREKA 74

