

**TRIANGLE FASTENER CORPORATION**

Cleveland, OH 44109

P: 216.351.9933 F: 216.351.5008

www.trianglefastener.com

**FASTENING SYSTEMS DESIGN AND ENGINEERING CENTER****MATERIAL SAFETY DATA SHEET**

Report No.: MSDS062607, Rev.KB052511

Date: May 25, 2011

These products do not meet the criteria of hazardous chemicals as defined by the Federal Occupational Safety and Health Communication Standard 29 CFR 1910.1200 (c). This form is being provided solely as general information and should not be construed as a determination that the product(s) are hazardous chemical(s).

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**General Information****Manufacturer:**

Triangle Fastener Corporation  
1925 Preble Avenue  
Pittsburgh, PA 15233

**Date:** January 1, 2000**Phone:** (412) 351-5000

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**Product Identification****Product Name:** Metal Fasteners (Bolts, screws, nuts, rivets, washers, nails stampings)**Formula:** N/A Carbon Steel and Stainless Steel

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**Typical Chemical Composition**

Various metals, ferrous and nonferrous platings / coatings (Optional):  
See "Additional or Miscellaneous Information"

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**Physical Data****Physical State:** Solid**Appearance:** Various Shapes**Boiling Point:** N/A**Melting Point:** Greater than 1400°F**PH:** N/A %**Odor:** None**Specific Gravity:** 7.6-7.8**Vapor Pressure:** N/A**Vapor Density:** N/A**Evaporation Rate:** N/A**Volatile by Volume:** N/A**Solubility in Water:** N/A

DISCLAIMER: THIS INFORMATION IS FOR GENERAL INFORMATION ONLY AND CANNOT BE CONSTRUED AS A SUBSTITUTE FOR COMPETENT PROFESSIONAL ADVICE OR SERVICE. ANY PARTY CONSIDERING APPLICATION OR USE DOES SO AT THEIR OWN RISK AND ASSUMES ANY AND ALL RESULTING LIABILITY FROM THIS APPLICATION OR USE.



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### FASTENING SYSTEMS DESIGN AND ENGINEERING CENTER

#### Fire and Explosion Hazard Data

Not Applicable

#### Reactivity Data

**Stability:** Stable

**Incompatibilities (Materials to Avoid):** Acids

**Polymerization:** Will Not Occur

**Hazardous Decomposition Products:** None Anticipated

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#### Health Hazard Data

**Health Effects/Signs & Symptoms:** Not Applicable

**Usual Route (s) of Entry:** Sharp Metal Fastener May Cut Skin

**Medical Conditions Possibly Aggravated:** None Known

**Carcinogen Information:** Chromium, Cadmium and Nickel have been included on NTP's list of Carcinogens. Gloves should be worn when handling Chromium, Nickel and Cadmium treated metals.

**Eye Contact:** Not anticipated to pose a significant eye hazard.

**Skin Contact:** Not anticipated to pose a significant skin hazard.

**Ingestion:** Not anticipated to pose a significant ingestion hazard.

**Inhalation:** Not considered an inhalation hazard.

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#### Occupational Exposure Control Measures

**Eye Protection:** Safety glasses recommended

**Skin Protection:** Gloves recommended

**Ingestion:** Never place metal fasteners in mouth

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#### Spill, Leak and Disposal Information

Procedures to follow if material is released or spilled: N/A

**Waste Disposal Method(s):** Any excess product can be recycled for further use or disposed of by methods which are in accordance with local, state and federal regulations.

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**FASTENING SYSTEMS DESIGN AND ENGINEERING CENTER****Additional or Miscellaneous Information**

Coatings may be applied (often at the customer's request) to the surface of metal products. These are usually classified as protective coatings or lubricants. The typical coatings are as follows:

Phosphates/Oil	Dyeing (Color Identification)
Phosphates/ Paint	Zinc Plating/ Chromate
Chrome Plating	Zinc Plating/ Chromate
Cadmium Plating/ Chromate	(Metal Filled) Paint
Waxes	

The possible presence of these coatings on metal products should be recognized and considered when evaluating potential employee health hazards and exposures during normal use.

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