

MATERIAL SAFETY DATA SHEET

Titan Industrial Chemicals, LLC
PO Box 635
Grover, MO 63040-0635

GENERAL INFORMATION NUMBER: (636) 273-9033

REVISION DATE: September 22, 2010
DATE OF ISSUE: January 4, 2011

I - Product Identification

Rust Free

PRODUCT CODE: 0346

CHEMICAL FORMULATION: Water based metal treatment.

NFPA HAZARD IDENTIFICATION SYSTEM: **HEALTH:** 1 **FLAMMABILITY:** 0 **REACTIVITY:** 0
HAZARD RATING: 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 - Insignificant

II - Hazardous Ingredients

Values reported as TWA unless noted.

<u>SUBSTANCE</u>	<u>APPROX</u> <u>%</u>	<u>OSHA</u> <u>PEL</u>	<u>ACGIH</u> <u>TLV</u>	<u>EPA 40 CFR:</u>			<u>CAS #</u>
				<u>302</u>	<u>355</u>	<u>372</u>	
Tannic Acid	1.00-5.00	N/E	N/E	N	N	N	1401-55-4
2-Butoxyethanol	1.00-5.00	25 ppm (skin)	25 ppm (skin)	N	N	Y	111-76-2
Oxalic Acid	<1.0	1 mg/m3	1 mg/m3	N	N	N	144-62-7

Key: **PEL:** Permissible Exposure Limit **TLV:** Threshold Limit Value **C:** Ceiling level **STEL:** Short Term Exposure Limit
N/A: Not Applicable **N/D:** Not Determined **N/E:** Not Established **Y:** Yes **N:** No
302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).
355: SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).
372: SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

III - Physical Data

BOILING POINT (°F): N/D **SPECIFIC GRAVITY:** 1.13
VAPOR PRESSURE (mm Hg): N/D **VOC CONTENT (% by weight):** <3.0
VAPOR DENSITY (AIR = 1): N/D **EVAPORATION RATE (WATER = 1):** N/D
SOLUBILITY IN WATER: Soluble **pH:** 1.5-2.5
APPEARANCE AND ODOR: Beige, opaque emulsion; bland odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): N/A **(TEST METHOD):** Closed cup
FLAMMABLE LIMITS IN AIR (VOLUME %) **UPPER:** N/D **LOWER:** N/D
EXTINGUISHING MEDIA: Water, foam, carbon dioxide, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES: Cool drums in vicinity of fire with water fog. Fire fighters should be equipped with full protective gear including self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARD: None

V - Reactivity Data

STABILITY: Stable**INCOMPATIBILITY:** Oxidizers, strong alkalis.**CONDITIONS TO AVOID:** None**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce oxides of carbon.**HAZARDOUS POLYMERIZATION:** Will not occur.

VI - Health Hazard Data

ROUTES OF ENTRY INHALATION: X EYE CONTACT: X SKIN CONTACT: X INGESTION: X**INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS:** None**EFFECTS OF OVEREXPOSURE****IF IN EYES:** Moderate irritation and redness.**IF ON SKIN:** Prolonged or repeated exposure can lead to mild irritation, formation of dark colored stains.**IF SWALLOWED:** Gastrointestinal irritation, nausea, cramps, and vomiting. **IF INHALED:** May cause respiratory tract irritation, headache, nausea.**EMERGENCY AND FIRST AID PROCEDURES****IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.**IF ON SKIN:** Wash with soap and water. Remove contaminated clothing and launder separately before reuse. If irritation persists, obtain medical attention.**IF SWALLOWED:** Contact physician or poison center immediately. Never give anything by mouth to an unconscious person.**IF INHALED:** Remove person to fresh air.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area. Contain spill. Soak up spilled material with inert absorbent material and place in properly labeled container for disposal.**WASTE DISPOSAL METHOD:** Consult local environmental authorities.

VIII - Special Protection Information

RESPIRATORY PROTECTION: Use with adequate ventilation. If recommended Exposure Limits are exceeded wear a NIOSH approved respirator, following manufacturer's recommendations.**VENTILATION****LOCAL:** Recommended**MECHANICAL:** Not required**PROTECTIVE GLOVES:** Chemical resistant gloves.**EYE PROTECTION:** Safety glasses or chemical goggles.**OTHER PROTECTIVE EQUIPMENT:** Eye wash station.**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool dry area. Do not freeze. Keep container tightly closed when not in use.**OTHER PRECAUTIONS:** Keep out of reach of children.

IX - Transportation Information (ground transportation only)

DOT ID NUMBER: None**DOT PROPER SHIPPING NAME:** None**DOT CLASS:** None**DOT PACKING GROUP:** None

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

REVISED DATE: September 22, 2010

Prepared by: Technical Dept.

DATE OF ISSUE: January 4, 2011

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Titan Industrial Chemicals, LLC assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material such vendees or users assume all risks associated with the use of this material.