

MATERIAL SAFETY DATA SHEET

Titan Industrial Chemicals, LLC
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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>OSHA</u>	<u>ACGIH</u>	<u>EPA 40 CFR:</u>			<u>CAS #</u>
	<u>%</u>	<u>PEL</u>	<u>TLV</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

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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.

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