

SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Product Name: Titanium sulfate 30% Solution
Product Code: T13535
Supplier: Pfaltz & Bauer, Inc.
172 E. Aurora Street
Waterbury, CT 06708 USA
Phone: 203 574-0075
Fax: 203 574-3181
Emergency Phone: CHEMTREC, US: 1-800-424-9300
CHEMTREC, International: 1-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

Statements of Hazard: Corrosive
Acute Health Hazard: Corrosive to eyes, skin, mucous membranes and respiratory system. May be harmful by ingestion, inhalation or skin absorption.
Chronic Health Hazard: Not Available
HMIS Rating: H:3 F:0 P:0
NFPA Rating: H:3 F:0 R:0

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.



Pictogram:

Signal Word: Danger

Hazard Statement(s): **H302** Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage..
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

Precautionary Statement(s): **P260** Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/ attention.

SECTION 3: COMPOSITION/INFORMATION on INGREDIENTS

<u>Chemical Name:</u>	Titanium sulfate
<u>Synonyms:</u>	Titanium(IV) sulfate solution
<u>CAS Number:</u>	13693-11-3
<u>MDL Number:</u>	MFCD00150567
<u>EINECS Number:</u>	237-215-6
<u>Beilstein Registry Number:</u>	Not Available
<u>Molecular Formula:</u>	TiOSO ₄ .H ₂ SO ₄ .8H ₂ O
<u>Molecular Weight:</u>	239.99
<u>Content:</u>	30%
<u>Notes:</u>	Aqueous solution

SECTION 4: FIRST AID MEASURES

<u>Eye Contact:</u>	Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.
<u>Skin Contact:</u>	Wash skin with soap and water. If irritation persists, seek medical attention.
<u>Ingestion:</u>	Do not induce vomiting. Seek medical attention.
<u>Inhalation:</u>	Move to a fresh air environment. Contact a physician if breathing becomes difficult.

SECTION 5: FIRE FIGHTING MEASURES

<u>Flash Point:</u>	Not Available
<u>Explosion Limits:</u>	Lower: Not Available Upper: Not Available
<u>Auto Ignition Temperature:</u>	Not Available
<u>Extinguishing Media:</u>	Carbon dioxide, dry chemical powder, alcohol-resistant foam or water spray.
<u>Protective Equipment:</u>	Wear self-contained respirator and fully protective impervious suit.
<u>Specific Hazards:</u>	May emit hazardous fumes under fire conditions.

SECTION 6: ACCIDENTAL RELEASE MEASURES

<u>Personal Protection:</u>	Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Keep unprotected persons away.
<u>Environmental Protection:</u>	Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

SECTION 7: HANDLING and STORAGE

<u>Handling:</u>	Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.
<u>Storage:</u>	Store in a tightly closed container in a dry, well-ventilated place.
<u>Sensitivities:</u>	Not Available
<u>Storage Temperature:</u>	15 – 30 °C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Eyes:</u>	Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash facility in your vicinity.
<u>Skin:</u>	Wear impervious gloves and protective clothing.
<u>Respiratory:</u>	Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

<u>Exposure Limits:</u>	<u>Country</u>	<u>Source</u>	<u>Type</u>	<u>Value</u>
	USA	ACGIH	TWA	Not Available
	USA	OSHA	STEL	Not Available
	USA	OSHA	PEL	Not Available

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

<u>Appearance:</u>	Liquid solution
<u>Odor:</u>	Not Available
<u>Melting Point:</u>	Not Available
<u>Boiling Point:</u>	Not Available
<u>pH Value:</u>	Not Available
<u>Density:</u>	1.33 g/cm ³
<u>Refractive Index, n²⁰_D:</u>	Not Available
<u>Viscosity:</u>	Not Available
<u>Solubility in Water:</u>	Not Available
<u>Vapor Pressure:</u>	Not Available
<u>Vapor Density(Air=1):</u>	Not Available

SECTION 10: STABILITY and REACTIVITY

<u>Stability:</u>	Stable under normal temperatures and pressures.
<u>Incompatibility:</u>	Strong oxidizing agents.
<u>Conditions to Avoid:</u>	Heat, Flame, Sparks, other ignition sources
<u>Hazardous Decomposition Products:</u>	Titanium oxides, Sulfur oxides

SECTION 11: TOXICOLOGICAL INFORMATION

<u>RTECS Reference:</u>	Not Available
<u>Target Organs:</u>	Teeth, Lungs, Cardiovascular system
<u>Toxicity Data:</u>	Not Available
<u>Skin corrosion/irritation:</u>	Not Available
<u>Serious eye damage/irritation:</u>	Not Available
<u>Carcinogenicity:</u>	Not Available

SECTION 12: ECOLOGICAL INFORMATION

<u>Toxicity:</u>	Not Available
<u>Persistence and degradability:</u>	Not Available

Bioaccumulative potential: Not Available
Mobility in soil: Not Available
PBT and vPvB assessment: Not Available
Other adverse effects: Not Available

SECTION 13: DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Corrosive Liquid, Acidic, Inorganic, N.O.S.

DOT UN Number: UN3264

DOT Hazard Class: Class 8

DOT Packing Group: III

IMDG Shipping Name: Corrosive Liquid, Acidic, Inorganic, N.O.S.

IMDG UN Number: UN3264

IMDG Hazard Class: Class 8

IMDG Packing Group: III

IATA Shipping Name: Corrosive Liquid, Acidic, Inorganic, N.O.S.

IATA UN Number: UN3264

IATA Hazard Class: Class 8

IATA Packing Group: III

SECTION 15: REGULATORY INFORMATION

United States:

Toxic Substance Control Act (TSCA): Listed

Superfund Amendments and Reauthorization Act (SARA 302): Not listed

Superfund Amendments and Reauthorization Act (SARA 311/312): Not listed

Superfund Amendments and Reauthorization Act (SARA 313): Not listed

European Union:

European Inventory of Existing Chemical Substances (EINECS): No. 237-215-6

Hazard Codes: C

Risk Statements: 31-34

Safety Statements: 26-27-36/37/39-45

Canada

Canadian Domestic Substances List (DSL): Listed

Canadian Domestic Substances List (NDSL): Not listed

SECTION 16: OTHER INFORMATION

Date Prepared: 01/10/2013 MH

The information above is presented in good faith. It is believed to be accurate and represents the best information currently available to us. However we make no warranty with respect to such information and we assume no liability resulting from its use. The user should consider this information as a supplement to other information that may be available and make independent judgment to ensure proper use to protect the health and safety of employees and the environment. Pfaltz and Bauer shall not be held liable for any damage resulting from handling or from contact with the above product.