1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name TITAN NEUTRALIZER

Other means of identification

Product Code 46000 Synonyms None

Details of the supplier of the safety data sheet

Company Name TITAN INDUSTRIAL CHEMICALS, LLC

P.O. BOX 635 GROVER, MO. 63040 636-273-9033

Emergency telephone number

Emergency Telephone 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Corrosive to metals	Category 1
Acute toxicity - Inhalation (Gases, Dusts/Mists)	Category 4
Carcinogenicity	Category 1A
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3 Respiratory tract irritation

Label elements

Emergency Overview

Danger

Hazard statements

May be corrosive to metals Harmful if swallowed May cause cancer Harmful if inhaled Causes eye damage Causes skin irritation

May cause respiratory irritation. May cause drowsiness or dizziness



Not DOT regulated

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Do not breathe dust/fume/gas/mist/vapors/spray Wear protective gloves

Precautionary Statements - Response

Specific Treatment (See Section 4 on the SDS)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair): Remove/Take off all contaminated clothing. Rinse skin with plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up away from incompatible materials.

Precautionary Statements - Disposal

Dispose of contents/container according to local/regional/ national/international regulations.

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity

0.14% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Phosphoric Acid	7664-38-2	1-5	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret. The exact identities of other ingredients has also been withheld as Trade Secret. However, they do not contribute to the identified hazards of the product and will be divulged to proper authorities in an emergency.

4. FIRST AID MEASURES

First aid measures

General advice Immediate medical attention is required.

Skin ContactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Eye contact Keep eye wide open while rinsing. Immediate medical attention is required. Rinse

immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub

affected area.

Inhalation Remove to fresh air and keep in a position comfortable for breathing. If not breathing, give

artificial respiration. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask

equipped with a one-way valve or other proper respiratory device.

Ingestion Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content

doesn't get into the lungs. Drink plenty of water. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or

poison control center if you feel unwell.

Self-protection of the first aiderUse personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Any additional important symptoms and effects are described in Section 11: Toxicology

Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat

symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water fog, foam, dry chemical powder, carbon dioxide.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautionsDo not allow into any sewer, on the ground or into any body of water. Should not be

released into the environment. Prevent further leakage or spillage if safe to do so. Prevent

product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or

tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up

Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take

up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces

with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handlingUse personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed

systems.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children. Keep in properly labeled containers. Store locked up.

Incompatible materialsIncompatible with strong bases. Incompatible with oxidizing agents and metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines No Exposure limits noted for ingredient(s).

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric acid 7664-38-2	STEL: 3mg/m3	PEL 1 mg/m3	STEL: 3 mg/m3

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d

962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protectionNo special technical protective measures are necessary. Wear protective gloves and

protective clothing. Prolonged contact may cause redness and irritation. Wear protective

gloves and protective clothing if needed.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep

away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing

and wash it before reuse. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance Clear
Color Colorless
Odor Mint

Odor threshold No Information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH <2 Specific Gravity 1.023 Viscosity Water Thin

Melting point/freezing point
Flash point
Boiling point / boiling range
Evaporation rate
Flammability (solid, gas)
Flammability Limits in Air

No Information available
No Information available
No Information available
No Information available

Upper flammability limit: No Information available

Lower flammability limit:No Information availableVapor pressureNo Information availableVapor densityNo Information available

Water solubility Complete

Partition coefficientNo Information availableAutoignition temperatureNo Information availableDecomposition temperatureNo Information available

Other Information

Density Lbs/Gal 8.52 VOC Content (%) 0

10. STABILITY AND REACTIVITY

Reactivity

May be reactive to metals.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Avoid incompatible materials..

Incompatible materials

Incompatible with strong bases. Incompatible with oxidizing agents and metals.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors: fluoride compounds, oxides of phosphorous, hydrogen gas when in contact with metals.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Avoid breathing vapors or mists. Harmful if inhaled. Inhalation of vapors in high

concentration may cause severe irritation or burns to the respiratory tract.

Eye contact Avoid contact with eyes. Causes severe eye damage. Corrosive to the eyes and may cause

severe damage including blindness.

Skin Contact Avoid contact with skin. Contact with skin may cause irritation.

Ingestion Do not taste or swallow. Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Phosphoric acid 7664-38-2	1911 mg/kg rat est.	3490 mg/kg rabbit est.	.8182 mg/L 8hr est 15773 mg/L 1 hr. est.

Information on toxicological effects

Symptoms No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Germ cell mutagenicityNo Information available.
No Information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name ACGIH	IARC	NTP	OSHA
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Phosphoric acid 7664-38-2 No Group 1 Yes No

IARC (International Agency for Research on Cancer)

Classified as group 1 carcinogen

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
No Information available.
May cause respiratory irritation.
No Information available.

Chronic toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure.

Possible risk of irreversible effects.

Target organ effectsRespiratory system,Aspiration hazardNo Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0.14% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

<u>Ecotoxicity-</u> This product is not classified as environmentally hazardous.

However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Phosphoric acid	No	LC50: 1909 mg/L 96 hr est.	No

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Other adverse effects No Information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and

regulations. Hazardous waste code D002, corrosive material

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies

Legend:

DOT

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
SARA 311/312 Hazard Categories	
Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric acid 7664-38-2	5000 lbs.	-	-	-

CERCLA

This material, as supplied, contains substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phosphoric acid 7664-38-2	5000 lb	5000 lb	RQ 5000 lb final RQ
			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains a chemical known to the state of California to cause cancer.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphoric acid 7664-38-2	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA Health hazards 3 Flammability 0 Instability 0 Physical and Chemical Properties Yes

HMIS Health hazards 3 Flammability 0 Physical hazards 0 Personal protection C

Issue Date November 11, 2015

Revision Date Revision Note

No Information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.