



## SAFETY DATA SHEET

### TITAN MACHINE WAREWASHING DETERGENT

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : TITAN MACHINE WAREWASHING DETERGENT  
Other means of identification : Not applicable  
Recommended use : Machine Warewashing Detergent  
Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.25 %

Company : SSDC Division  
Kay Chemical Company  
4050 Corporate Dr., #100  
Grapevine, Texas USA 76051-2326  
1-800-532-7732 (Customer Service)

Emergency health information : 1-800-391-1504

Issuing date : 09/09/2016

#### SECTION 2. HAZARDS IDENTIFICATION

##### GHS Classification

##### Product AS SOLD

Not a hazardous substance or mixture.

##### Product AT USE DILUTION

Not a hazardous substance or mixture.

##### GHS label elements

##### Product AS SOLD

Precautionary Statements : **Prevention:**  
Wash hands thoroughly after handling.  
**Response:**  
Get medical advice/ attention if you feel unwell.  
**Storage:**  
Store in accordance with local regulations.

##### Product AT USE DILUTION

Precautionary Statements : **Prevention:**  
Wash hands thoroughly after handling.  
**Response:**  
Get medical advice/ attention if you feel unwell.  
**Storage:**  
Store in accordance with local regulations.

##### Product AS SOLD

Other hazards : None known.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

##### Product AS SOLD

Pure substance/mixture : Mixture

# SAFETY DATA SHEET

## TITAN MACHINE WAREWASHING DETERGENT

Chemical name	CAS-No.	Concentration (%)
potassium carbonate	584-08-7	5 - 10
alanine, n,n-bis(carboxymethyl)-, trisodium salt	164462-16-2	1 - 5
2-phosphonobutane-1,2,4-tricarboxylic acid	37971-36-1	1 - 5

### Product AT USE DILUTION

No hazardous ingredients

## SECTION 4. FIRST AID MEASURES

### Product AS SOLD

- In case of eye contact : Rinse with plenty of water.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.
- Protection of first-aiders : No special precautions are necessary for first aid responders.
- Notes to physician : No specific measures identified.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

### Product AT USE DILUTION

- In case of eye contact : Rinse with plenty of water.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.

## SECTION 5. FIRE-FIGHTING MEASURES

### Product AS SOLD

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
Nitrogen oxides (NOx)  
Sulfur oxides  
Oxides of phosphorus
- Special protective equipment for fire-fighters : Use personal protective equipment.

# SAFETY DATA SHEET

## TITAN MACHINE WAREWASHING DETERGENT

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Product AS SOLD

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

#### Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

### SECTION 7. HANDLING AND STORAGE

#### Product AS SOLD

Advice on safe handling : Wash hands after handling. For personal protection see section 8.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : 5 °C to 50 °C

#### Product AT USE DILUTION

Advice on safe handling : Wash hands after handling. For personal protection see section 8.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Product AS SOLD

##### Ingredients with workplace control parameters

Ingredients	CAS-No.	Form of exposure	Permissible concentration	Basis
2-phosphonobutane-1,2,4-tricarboxylic acid	37971-36-1	TWA (Aerosol.)	10 mg/m <sup>3</sup>	AIHA WEEL

# SAFETY DATA SHEET

## TITAN MACHINE WAREWASHING DETERGENT

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal protective equipment

Eye protection : No special protective equipment required.  
Hand protection : No special protective equipment required.  
Skin protection : No special protective equipment required.  
Respiratory protection : No personal respiratory protective equipment normally required.  
Hygiene measures : Wash hands before breaks and immediately after handling the product.

### Product AT USE DILUTION

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal protective equipment

Eye protection : No special protective equipment required.  
Hand protection : No special protective equipment required.  
Skin protection : No special protective equipment required.  
Respiratory protection : No personal respiratory protective equipment normally required.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: clear, yellow	colorless
Odor	: odorless	odorless
pH	: 10.0 - 10.7, 100 %	10.0
Flash point	: Not applicable	
Odor Threshold	: No data available	
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: > 100 °C	
Evaporation rate	: No data available	
Flammability (solid, gas)	: No data available	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapor pressure	: No data available	
Relative vapor density	: No data available	
Relative density	: 0.97 - 1.2	
Water solubility	: soluble	

## SAFETY DATA SHEET

### TITAN MACHINE WAREWASHING DETERGENT

Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: No data available
VOC	: No data available

### SECTION 10. STABILITY AND REACTIVITY

#### Product AS SOLD

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: Acids
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

#### Potential Health Effects

#### Product AS SOLD

Eyes	: Health injuries are not known or expected under normal use.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Health injuries are not known or expected under normal use.

#### Product AT USE DILUTION

Eyes	: Health injuries are not known or expected under normal use.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.

## SAFETY DATA SHEET

### TITAN MACHINE WAREWASHING DETERGENT

Chronic Exposure : Health injuries are not known or expected under normal use.

#### Experience with human exposure

##### Product AS SOLD

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

##### Product AT USE DILUTION

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

#### Toxicity

##### Product AS SOLD

###### Product

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Acute inhalation toxicity : No data available

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg

Skin corrosion/irritation : No data available

Serious eye damage/eye irritation : No data available

Respiratory or skin sensitization : No data available

Carcinogenicity : No data available

Reproductive effects : No data available

Germ cell mutagenicity : No data available

Teratogenicity : No data available

STOT-single exposure : No data available

STOT-repeated exposure : No data available

Aspiration toxicity : No data available

##### Ingredients

Acute inhalation toxicity : potassium carbonate  
4 h LC50 Rat: > 5.26 mg/l

### SECTION 12. ECOLOGICAL INFORMATION

##### Product AS SOLD

###### Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

## SAFETY DATA SHEET

### TITAN MACHINE WAREWASHING DETERGENT

#### Product

Toxicity to fish : No data available  
Toxicity to daphnia and other aquatic invertebrates : No data available  
Toxicity to algae : No data available

#### Ingredients

Toxicity to fish : potassium carbonate  
96 h LC50 Fish: 230 mg/l  
  
alanine, n,n-bis(carboxymethyl)-, trisodium salt  
96 h LC50 Fish: > 200 mg/l  
  
2-phosphonobutane-1,2,4-tricarboxylic acid  
96 h LC50 Fish: > 1,042 mg/l

#### Persistence and degradability

##### Product AS SOLD

Readily biodegradable.

##### Product AT USE DILUTION

Not applicable - inorganic

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

##### Product AS SOLD

Disposal methods : Diluted product can be flushed to sanitary sewer.

Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

##### Product AT USE DILUTION

Disposal methods : Diluted product can be flushed to sanitary sewer.

Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

### SECTION 14. TRANSPORT INFORMATION

##### Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

##### Land transport (DOT)

Not dangerous goods

## SAFETY DATA SHEET

### TITAN MACHINE WAREWASHING DETERGENT

#### Sea transport (IMDG/IMO)

Not dangerous goods

### SECTION 15. REGULATORY INFORMATION

#### Product AS SOLD

#### EPCRA - Emergency Planning and Community Right-to-Know

#### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

#### The ingredients of this product are reported in the following inventories:

**Switzerland. New notified substances and declared preparations :**  
not determined

**United States TSCA Inventory :**  
On TSCA Inventory

**Canadian Domestic Substances List (DSL) :**  
All components of this product are on the Canadian DSL

**Australia Inventory of Chemical Substances (AICS) :**  
On the inventory, or in compliance with the inventory

**New Zealand. Inventory of Chemical Substances :**  
On the inventory, or in compliance with the inventory

**Japan. ENCS - Existing and New Chemical Substances Inventory :**  
On the inventory, or in compliance with the inventory

**Japan. ISHL - Inventory of Chemical Substances (METI) :**  
not determined

**Korea. Korean Existing Chemicals Inventory (KECI) :**  
On the inventory, or in compliance with the inventory

**Philippines Inventory of Chemicals and Chemical Substances (PICCS) :**  
On the inventory, or in compliance with the inventory

**China. Inventory of Existing Chemical Substances in China (IECSC) :**



# SAFETY DATA SHEET

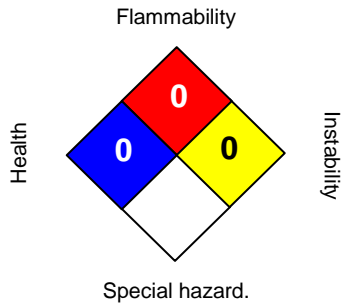
## TITAN MACHINE WAREWASHING DETERGENT

On the inventory, or in compliance with the inventory

### SECTION 16. OTHER INFORMATION

#### Product AS SOLD

##### NFPA:



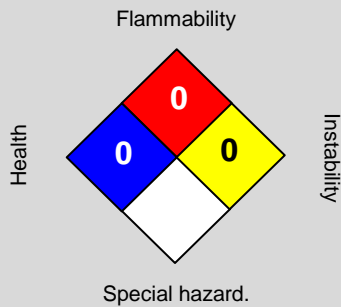
##### HMIS III:

<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

#### Product AT USE DILUTION

##### NFPA:



##### HMIS III:

<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Issuing date : 09/09/2016  
Version : 1.0  
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material 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.