

Issuing date 03-Jul-2012

Revision Date 19-Sep-2014

Version 2

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product name** Daley Mark Tan

### Other means of identification

**Product Code** 3240  
**Document** 3240CG1-4

### Recommended use of the chemical and restrictions on use

**Recommended use** Acid Rinse Detergent.

### Details of the supplier of the safety data sheet

#### **Distributor**

Daley International  
 4100 W. 76th Street,  
 Chicago, IL 60652

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC: 1-800-424-9300 (NORTH AMERICA)  
 1-703-527-3887 (INTERNATIONAL)

**Company Phone Number** 773-284-6565

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

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

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

### Label elements

#### **Emergency Overview**

**Danger**

#### **Hazard Statements**

Causes severe skin burns and eye damage



**Appearance** Transparent

**Physical state** Liquid

**Odor** Acid

#### **Precautionary Statements - Prevention**

- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

- Immediately call a POISON CENTER or doctor/physician
- 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 immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Immediately call a POISON CENTER or doctor/physician
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other information**

- Harmful to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS-No	Weight-%	Trade Secret
Phosphoric acid	7664-38-2	1% - 5%	*
Oxalic acid	144-62-7	1% - 2%	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures for different exposure routes**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash with water for 5-10 minutes. Remove any contaminated clothing and wash before reuse. If condition persist, Consult a physician.
<b>Inhalation</b>	Remove to fresh air. Seek medical attention if symptoms persist.
<b>Ingestion</b>	Give large quantities of water to dilute contents. Do NOT induce vomiting. Call a physician.
<b>Protection of First-aiders</b>	Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Most important symptoms/effects, acute and delayed**

<b>Main Symptoms</b>	The most important known symptoms and effects are described in the labelling in section 2 and/or in section 11.
----------------------	---

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

No information available.

**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**

**Personal precautions** Avoid contact with the skin and the eyes. Use personal protective equipment. Ensure adequate ventilation.

**Environmental precautions**

**Environmental precautions** Neutralization is normally necessary before waste water is discharged into water treatment plants. See Section 12 for additional Ecological Information.

**Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so. Contain spill. Neutralize with weak base solution.

**Methods for cleaning up** Mop up & flush neutralized material to sewer with plenty of water.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Avoid prolonged exposure. KEEP OUT OF REACH OF CHILDREN. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Technical measures/Storage conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible products** Alkalies. Bleach.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
---------------	-----------	----------	------------

Phosphoric acid 7664-38-2	STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> test	TWA: 1 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Oxalic acid 144-62-7	STEL: 2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	IDLH: 500 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>

NIOSH IDLH: Immediately Dangerous to Life or Health

#### Appropriate engineering controls

**Engineering Measures** Ensure that eyewash stations and safety showers or an equivalent method of decontamination are close to the work location.

#### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Splash-proof chemical goggles or face shield.

**Skin and body protection** Acid proof gloves, impervious rubber boots & apron.

**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.

**Hygiene measures** Do not eat, drink or smoke when using this product. Practice good personal hygiene. Wash after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Acid
<b>Appearance</b>	Transparent	<b>Odor Threshold</b>	No information available
<b>Color</b>	Colorless		
<b>Property</b>	<b>Values</b>	<b>Remarks • Methods</b>	
pH	1.0	± 0.5	
Melting/freezing point	No information available		
Boiling point/boiling range	100 °C / 212 °F		
Flash Point	No information available	TCC	
Evaporation rate	No information available	Similar to water	
Flammability (solid, gas)	No information available		
Flammability Limits in Air			
Upper flammability limit	No information available		
Lower flammability limit	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific Gravity	1.022 ± 0.005		
Water solubility	No information available	Completely soluble.	
Solubility in other solvents	No information available		
Partition coefficient: n-octanol/water	No information available		
Autoignition temperature	No information available		
Decomposition temperature	No information available		
Viscosity, kinematic	No information available		
Viscosity, dynamic	No information available		
Explosive properties	No information available		
Oxidizing Properties	No information available		

#### Other information

Softening point	N/A
Molecular Weight	N/A
VOC Content(%)	Negligible
Density VALUE	N/A

Bulk Density VALUE N/A

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

Reacts with chlorine-containing products such as bleach to produce toxic gas.

### Conditions to Avoid

Extremes of temperature and direct sunlight.

### Incompatible Materials

Alkalies, Bleach.

### Hazardous Decomposition Products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Product Information</b>	Causes severe skin burns and eye damage
<b>Inhalation</b>	Irritating to respiratory system.
<b>Eye contact</b>	Corrosive to the eyes and may cause severe damage including blindness.
<b>Skin contact</b>	Contact causes severe skin irritation and possible burns.
<b>Ingestion</b>	Severe irritation of the gastrointestinal tract, causing vomiting, nausea and burns.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
Phosphoric acid 7664-38-2	= 1530 mg/kg ( Rat )	= 2740 mg/kg ( Rabbit )	> 850 mg/m <sup>3</sup> ( Rat ) 1 h
Oxalic acid 144-62-7	= 375 mg/kg ( Rat )	= 20000 mg/kg ( Rat )	-

### Information on toxicological effects

**Symptoms** No information available.

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

<b>Sensitization</b>	No information available.
<b>Mutagenic effects</b>	No information available.
<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Chronic toxicity</b>	No known effect.
<b>Aspiration hazard</b>	No information available.

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	18870 mg/kg
ATEmix (dermal)	45879 mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

0.01% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Phosphoric acid 7664-38-2	-	3 - 3.5: 96 h Gambusia affinis mg/L LC50	4.6: 12 h Daphnia magna mg/L EC50
Oxalic acid 144-62-7	-	4000: 24 h Lepomis macrochirus mg/L LC50 static	125 - 150: 48 h Daphnia magna mg/L EC50 Static
Glycolic acid 79-14-1	-	5000: 96 h Brachydanio rerio mg/L LC50 static	-

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
Oxalic acid 144-62-7	-0.81

**Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment****Waste Disposal Methods**

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

**Contaminated packaging**

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Phosphoric acid 7664-38-2	Corrosive
Oxalic acid 144-62-7	Toxic

### 14. TRANSPORT INFORMATION

**DOT**

Proper shipping name

Not regulated

Cleaning Compound, Not Regulated

### 15. REGULATORY INFORMATION

**International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	-
ENCS	-
IECSC	Complies
KECL	Complies

PICCS Complies  
AICS Complies

**Legend:**

**TSCA** - All components of this product are listed or are exempt or excluded from listing on the United States Toxic Substances Control Act Section 8(b) Inventory.

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**U.S. Federal Regulations****SARA 313**

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

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	Yes

**Clean Water Act**

This product contains the following substances which are regulated 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 lb	-	-	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Phosphoric acid 7664-38-2	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product contains substances regulated by state right-to-know regulations.

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health Hazards 2	Flammability 0	Instability 0	Physical and chemical hazards -
<b>HMIS</b>	Health hazard 2	Flammability 0	Physical Hazards 0	Personal protection X

**Prepared By** Daley International  
4100 West 76th Street  
Chicago, IL 60652

**Issuing date** 03-Jul-2012

Revision Date 19-Sep-2014

Revision Note

2

Disclaimer

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.

**End of Safety Data Sheet**