

Issue Date: 17-Sep-2012

Revision Date: 11-Dec-2015

Version 2

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** United 358 Machine Dishwashing Liquid Detergent

**Other means of identification**

**SDS #** UNITED-358

**UN/ID No** UN3266

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

**Recommended Use** Liquid dishwashing detergent.

**Used Advised Against** For industrial and institutional use only.

**Details of the supplier of the safety data sheet**

**Supplier Address**

United Laboratories, Inc.  
320 37th Avenue  
St. Charles, IL 60174  
www.unitedlabsinc.com  
www.unitedlabsinc.ca

**Emergency Telephone Number**

**Company Phone Number** 800-323-2594 (to reorder)  
**Emergency Telephone (24 hr)** INFOTRAC 1-800-535-5053 (North America)  
1-352-323-3500 (International)

**2. HAZARDS IDENTIFICATION**

**Appearance** Green liquid

**Physical State** Liquid

**Odor** Light odor

**Classification**

Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1

**Signal Word**

**Danger**

**Hazard Statements**

Causes severe skin burns and eye damage.



**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.

**Other Hazards**

Harmful to aquatic life with long lasting effects.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Tetrapotassium pyrophosphate	7320-34-5	1-10
Potassium hydroxide	1310-58-3	1-10
Tetrasodium EDTA	64-02-8	1-10

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	Immediately call a poison center or doctor/physician.
<b>Eye Contact</b>	Immediately flush with plenty of water for up to 15 minutes. Immediately call a poison center or doctor/physician.
<b>Skin Contact</b>	Wash with soap and water. If symptoms develop, seek medical attention.
<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Immediately call a poison center or doctor/physician.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting. If conscious, give several glasses of water to dilute. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Most important symptoms and effects**

<b>Symptoms</b>	Causes severe skin burns and eye damage.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Water. Dry chemical. Carbon dioxide (CO2).

**Unsuitable Extinguishing Media** No information available.

**Specific Hazards Arising from the Chemical**

None known.

**Hazardous Combustion Products** When strongly heated, as in a fire, this product may produce oxides of carbon.

**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. All containers should be cooled with water to prevent vapor pressure build up.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protective equipment as required.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Small spills: Flush up to one quart to sanitary drain; Rinse area thoroughly. Large spills: Soak up with an inert absorbent and place in designated disposal container. Rinse area thoroughly.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection.

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

**Storage Conditions** Store locked up. Keep containers tightly closed when not in use. Store in a cool, dry, well-ventilated place. Protect from freezing.

**Incompatible Materials** Strong oxidizing agents such as bleach. Acids.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Formic acid 64-18-6	STEL: 10 ppm TWA: 5 ppm	TWA: 5 ppm TWA: 9 mg/m <sup>3</sup> (vacated) TWA: 5 ppm (vacated) TWA: 9 mg/m <sup>3</sup>	IDLH: 30 ppm TWA: 5 ppm TWA: 9 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Normally not required.

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

**Eye/Face Protection** Chemical safety goggles are recommended.

**Skin and Body Protection** Chemical resistant gloves are recommended.

**Respiratory Protection** Normally not required.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Light odor
<b>Appearance</b>	Green liquid		
<b>Color</b>	Green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	13-14	
Melting Point/Freezing Point	No information available.	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	None	
Evaporation Rate	No information available.	
Flammability (Solid, Gas)	Liquid-Not applicable	
Upper Flammability Limits	No information available.	
Lower Flammability Limit	No information available.	
Vapor Pressure	No information available.	
Vapor Density	No information available.	
Specific Gravity	1.082	(Water = 1)
Water Solubility	Soluble	
Solubility in other solvents	No information available.	
Partition Coefficient	No information available.	
Auto-ignition Temperature	No information available.	
Decomposition Temperature	No information available.	
Kinematic Viscosity	No information available.	
Dynamic Viscosity	No information available.	
Explosive Properties	No information available.	
Oxidizing Properties	No information available.	
VOC Content	None	

**10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

Under normal conditions of storage and use, hazardous polymerization will not occur.

**Conditions to Avoid**

Excessive heat and fire. Incompatible Materials.

**Incompatible Materials**

Strong oxidizing agents such as bleach. Acids.

**Hazardous Decomposition Products**

When strongly heated, as in a fire, this product may produce oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Eye Contact</b>	Causes severe eye damage.
<b>Skin Contact</b>	Causes severe skin burns.
<b>Inhalation</b>	Do not inhale.
<b>Ingestion</b>	Do not ingest.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Tetrapotassium pyrophosphate 7320-34-5	-	> 4640 mg/kg ( Rabbit )	-
Potassium hydroxide 1310-58-3	214 mg/kg ( Rat )	-	-
Tetrasodium EDTA 64-02-8	10 g/kg ( Rat )	-	-
Nitrilotriacetic acid 139-13-9	1100 mg/kg ( Rat )	-	-
Formic acid 64-18-6	730 mg/kg ( Rat )	-	-

### Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

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

**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

### Numerical measures of toxicity

No information available.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

No information available.

### Persistence/Degradability

No information available.

### Bioaccumulation

No information available.

### Mobility

No information available.

### Other Adverse Effects

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**US EPA Waste Number**

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Formic acid 64-18-6	U123	Included in waste streams: K009, K010		U123

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Potassium hydroxide 1310-58-3	Toxic Corrosive

**14. TRANSPORT INFORMATION****Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances. Per the DOT in 49 CFR 173.154 for corrosive in packing group III in 1 gallon bottles not over 5 liters, it can be renamed Consumer commodity ORM-D until December 31, 2020 shipping on the ground.

**DOT**

<b>UN/ID No</b>	UN3266
<b>Proper Shipping Name</b>	Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)
<b>Hazard Class</b>	8
<b>Packing Group</b>	III

**IATA**

<b>UN/ID No</b>	UN3266
<b>Proper Shipping Name</b>	Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)
<b>Hazard Class</b>	8
<b>Packing Group</b>	III

**IMDG**

<b>UN/ID No</b>	UN3266
<b>Proper Shipping Name</b>	Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	This material may meet the definition of a marine pollutant

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Listed
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**Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

**US Federal Regulations**

**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Nitriiotriacetic acid - 139-13-9	139-13-9	<1	0.1
Formic acid - 64-18-6	64-18-6	<1	1.0

**CWA (Clean Water Act)**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide 1310-58-3 ( 1-10 )	1000 lb			X

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Nitriiotriacetic acid - 139-13-9	Carcinogen

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Potassium hydroxide 1310-58-3	X	X	X
Nitriiotriacetic acid 139-13-9	X	X	X
Formic acid 64-18-6	X	X	X

**16. OTHER INFORMATION****NFPA****Health Hazards**

No information available

**Flammability**

No information available

**Instability**

No information available

**Special Hazards**

No information available

**HMIS****Health Hazards**

2

**Flammability**

0

**Physical Hazards**

0

**Personal Protection**

N+P+T

**Issue Date:**

17-Sep-2012

**Revision Date:**

11-Sep-2015

**Revision Note:**

New format

**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 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**