

10/28/17



Be Right™

# SAFETY DATA SHEET

Issue Date 10-Jun-2016

Revision Date 17-Jan-2017

Version 3

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## 1. IDENTIFICATION

**Product identifier**

**Product Name** Cleaning Solution for Amtax sc Analyzer

**Other means of identification**

**Product Code(s)** 2894246

**Safety data sheet number** M02429

**UN/ID no** UN3265

**Synonyms**

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

**Recommended Use** Cleaning solution.

**Uses advised against** None.

**Restrictions on use** None.

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

**Manufacturer Address**

Hach Company  
P.O.Box 389 Loveland, CO 80539 USA  
(970) 669-3050

**Emergency telephone number**

(303) 623-5716 - 24 Hour Service (515)232-2533 - 8am - 4pm CST

## 2. HAZARDS IDENTIFICATION

**Classification**

**Regulatory Status**

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

Corrosive to metals	Category 1
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

**Hazards not otherwise classified (HNOC)**

Not applicable

**Label elements**

**Signal word - Warning**

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**Hazard statements**

H290 - May be corrosive to metals  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation

**Precautionary statements**

P264 - Wash face, hands and any exposed skin thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P234 - Keep only in original container  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P337 + P313 - If eye irritation persists: Get medical advice/attention  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse  
P390 - Absorb spillage to prevent material damage  
P406 - Store in corrosive resistant stainless steel container with a resistant inliner

**Other Information**

Not applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Not applicable

**Mixture**

**Synonyms**

Percent ranges are used where confidential product information is applicable.

Chemical Name	CAS No	Percent Range	HMRIC #
Citric acid	77-92-9	40 - 50%	-

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	IF IN EYES: Flush eyes for at least 15 minutes. May cause skin irritation.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Skin contact</b>	For minor skin contact, avoid spreading material on unaffected skin. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Remove and isolate contaminated clothing and shoes. Call a POISON CENTER or doctor if you feel unwell. If skin irritation persists, call a physician.
<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	IF SWALLOWED: Rinse Mouth. If symptoms persist, call a physician.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

##### Most important symptoms and effects, both acute and delayed

**Symptoms** See Section 11: TOXICOLOGICAL INFORMATION.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** 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.

##### Flammable properties

Substance does not burn.

##### 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.

**Hazardous combustion products** This material will not burn.

##### 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

##### **U.S. Notice**

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

**EC Notice** Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

**WHMIS Notice** Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

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

**Personal precautions** Evacuate personnel to safe areas. Do not touch or walk through spilled material. Ventilate affected area. Use personal protective equipment as required.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Take necessary precautions in observance of pertinent physical hazards. Neutralize spill if necessary. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with local, state and federal regulations or laws.

**Emergency Response Guide Number** 153

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Absorb spillage to prevent material damage.

**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 containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep/store only in original container.

**Flammability class** Not applicable

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Legend** See section 16 for terms and abbreviations

**Appropriate engineering controls**

**Engineering Controls**  
 Showers  
 Eyewash stations  
 Ventilation systems

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

**Eye/face protection** Wear tight sealing safety goggles and/or face protection shield. Avoid contact with eyes.  
**Skin and body protection** Wear protective gloves and protective clothing.  
**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.  
**General Hygiene Considerations** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear suitable gloves and eye/face protection. Wash face, hands and any exposed skin thoroughly after handling. Regular cleaning of equipment, work area and clothing is recommended. Handle in accordance with good industrial hygiene and safety practice. Avoid prolonged or repeated contact with skin. Take off all contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs.

**Environmental exposure controls**

Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

**Physical state** Liquid  
**Gas Under Pressure** Not classified according to GHS criteria  
**Appearance** aqueous solution **Color** Colorless to light yellow  
**Odor** None **Odor threshold** No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Molecular weight</b>	No data available	
<b>pH</b>	No data available	
<b>Melting point/freezing point</b>	~ -7 °C / 19 °F	Estimation based on theoretical calculation
<b>Boiling point / boiling range</b>	~ 102 °C / 216 °F	Estimation based on theoretical calculation
<b>Evaporation rate</b>	1.29 (water = 1)	Estimation based on theoretical calculation
<b>Vapor pressure</b>	22.277 mm Hg / 2.97 kPa at 25 °C / 77 °F	Estimation based on theoretical calculation
<b>Vapor density (air = 1)</b>	0.62 (air = 1)	
<b>Specific gravity (water = 1 / air = 1)</b>	1.2006	
<b>Partition Coefficient (n-octanol/water)</b>	Not applicable	

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**Soil Organic Carbon-Water Partition Coefficient** Not applicable  
**Autoignition temperature** No data available  
**Decomposition temperature** No data available  
**Dynamic viscosity** No data available  
**Kinematic viscosity** No data available

**Solubility(ies)**

**Water solubility**

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Soluble	> 1000 mg/L	25 °C / 77 °F

**Solubility in other solvents**

<u>Chemical Name</u>	<u>Solubility classification</u>	<u>Solubility</u>	<u>Solubility Temperature</u>
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

**Other Information**

**Metal Corrosivity** Classified as corrosive to metal according to GHS criteria  
**GHS Metal Corrosivity Classification** Category 1, H290  
**Steel Corrosion Rate** No data available  
**Aluminum Corrosion Rate** No data available  
**Bulk density** Not applicable  
**Explosive properties** Not classified according to GHS criteria.  
**Explosion data** No data available  
**Upper explosion limit** No data available  
**Lower explosion limit** No data available  
**Flammable properties** Not classified as flammable according to GHS criteria.  
**Flammability Limit in Air**  
**Upper flammability limit:** No data available  
**Lower flammability limit:** No data available  
**Flash point** No data available  
**Method** No information available  
**Oxidizing properties** Not classified according to GHS criteria.  
**Reactivity propeties** Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

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## 10. STABILITY AND REACTIVITY

### Reactivity properties

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria

### Chemical stability

Stable under recommended storage conditions.

### Special dangers of the product

None reported

### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

### Conditions to avoid

Extremes of temperature and direct sunlight. Incompatible materials.

### Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

### Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

### Explosive properties

Not classified according to GHS criteria.

**Upper explosion limit** No data available

**Lower explosion limit** No data available

### Autoignition temperature

No data available

### Sensitivity to Static Discharge

None reported

### Sensitivity to Mechanical Impact

None reported

## 11. TOXICOLOGICAL INFORMATION

**NIOSH (RTECS) Number** None reported

### Information on Likely Routes of Exposure

<b>Product Information</b>	Causes skin irritation. Causes serious eye irritation.
<b>Inhalation</b>	No known effect based on information supplied.
<b>Eye contact</b>	Severely irritating to eyes.
<b>Skin contact</b>	Causes skin irritation.
<b>Ingestion</b>	Ingestion may cause irritation to mucous membranes.
<b>Aggravated Medical Conditions</b>	Skin disorders. Eye disorders.
<b>Toxicologically synergistic products</b>	None known.
<b>Toxicokinetics, metabolism and distribution</b>	See ingredients information below.

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**Product Acute Toxicity Data**

Oral Exposure Route No data available  
 Dermal Exposure Route No data available  
 Inhalation (Dust/Mist) Exposure Route No data available  
 Inhalation (Vapor) Exposure Route No data available  
 Inhalation (Gas) Exposure Route No data available

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

ATEmix (oral)	7,203.00 mg/kg
ATEmix (dermal)	6,002.00 mg/kg

**Ingredient Acute Toxicity Data**

Oral Exposure Route If available, see data below

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Citric acid (40 - 50%) CAS#: 77-92-9	Rat LD <sub>50</sub>	3000 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)

Dermal Exposure Route If available, see data below

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Citric acid (40 - 50%) CAS#: 77-92-9	Rat LD <sub>50</sub>	> 2000 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)

Inhalation (Dust/Mist) Exposure Route If available, see data below

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Citric acid (40 - 50%) CAS#: 77-92-9	Rat TD <sub>Lo</sub>	0.180 mg/L	None reported	<b>Lungs, Thorax, or Respiration</b> Other changes <b>Liver</b> Impaired liver function tests <b>Biochemical</b> Enzyme inhibition, induction, or change in blood or tissue levels (dehydrogenases)	RTECS (Registry of Toxic Effects of Chemical Substances)

Inhalation (Vapor) Exposure Route If available, see data below

Inhalation (Gas) Exposure Route No data available

**Product Skin Corrosion/Irritation Data**

No data available.

**Ingredient Skin Corrosion/Irritation Data**

If available, see data below

Chemical Name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and
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						<b>sources for data</b>
Citric acid (40 - 50%) CAS#: 77-92-9	Standard Draize Test	Rabbit	500 mg	24 hours	Mild skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

**Product Serious Eye Damage/Eye Irritation Data**

No data available.

**Ingredient Eye Damage/Eye Irritation Data**

If available, see data below

<b>Chemical Name</b>	<b>Test method</b>	<b>Species</b>	<b>Reported dose</b>	<b>Exposure time</b>	<b>Results</b>	<b>Key literature references and sources for data</b>
Citric acid (40 - 50%) CAS#: 77-92-9	Standard Draize Test	Rabbit	0.750 mg	24 hours	Eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

**Sensitization Information**

**Product Sensitization Data**

**Skin Sensitization Exposure Route** No data available.

**Respiratory Sensitization Exposure Route** No data available.

**Ingredient Sensitization Data**

**Skin Sensitization Exposure Route** No data available.

**Respiratory Sensitization Exposure Route** No data available.

**Chronic Toxicity Information**

**Product Repeat Dose Toxicity Data**

**Oral Exposure Route** No data available.

**Dermal Exposure Route** No data available.

**Inhalation (Dust/Mist) Exposure Route** No data available.

**Inhalation (Vapor) Exposure Route** No data available.

**Inhalation (Gas) Exposure Route** No data available.

**Ingredient Repeat Dose Toxicity Data**

**Oral Exposure Route**

If available, see data below

<b>Chemical Name</b>	<b>Endpoint type</b>	<b>Reported dose</b>	<b>Exposure time</b>	<b>Toxicological effects</b>	<b>Key literature references and sources for data</b>
Citric acid (40 - 50%) CAS#: 77-92-9	Rat TD <sub>Lo</sub>	930 mg/kg	15 days	<b>Biochemical</b> Enzyme inhibition, induction, or change in blood or tissue levels (dehydrogenases) <b>Blood</b> Changes in serum composition (e.g. TP, bilirubin, cholesterol)	RTECS (Registry of Toxic Effects of Chemical Substances)

**Dermal Exposure Route** No data available

**Inhalation (Dust/Mist) Exposure Route** If available, see data below

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Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Citric acid (40 - 50%) CAS#: 77-92-9	Rat TD <sub>Lo</sub>	0.180 mg/L	None reported	<b>Lungs, Thorax, or Respiration</b> Other changes <b>Liver</b> Impaired liver function tests <b>Biochemical</b> Enzyme inhibition, induction, or change in blood or tissue levels (dehydrogenases)	RTECS (Registry of Toxic Effects of Chemical Substances)

Inhalation (Vapor) Exposure Route No data available  
 Inhalation (Gas) Exposure Route No data available

Chemical Name	CAS No	ACGIH	IARC	NTP	OSHA
Citric acid	77-92-9	-	-	-	-

**Legend**

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of Labor)	Does not apply

**Product Carcinogenicity Data** No data available  
 Oral Exposure Route No data available  
 Dermal Exposure Route No data available  
 Inhalation (Dust/Mist) Exposure Route No data available  
 Inhalation (Vapor) Exposure Route No data available  
 Inhalation (Gas) Exposure Route No data available

**Ingredient Carcinogenicity Data**

Oral Exposure Route No data available  
 Dermal Exposure Route No data available  
 Inhalation (Dust/Mist) Exposure Route No data available  
 Inhalation (Vapor) Exposure Route No data available  
 Inhalation (Gas) Exposure Route No data available

**Product Germ Cell Mutagenicity *in vitro* Data**  
 No data available.

**Ingredient Germ Cell Mutagenicity *in vitro* Data** No data available  
 Oral Exposure Route No data available  
 Dermal Exposure Route No data available

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Inhalation (Dust/Mist) Exposure Route No data available  
Inhalation (Vapor) Exposure Route No data available  
Inhalation (Gas) Exposure Route No data available

**Ingredient Germ Cell Mutagenicity *in vivo* Data**

Oral Exposure Route No data available  
Dermal Exposure Route No data available  
Inhalation (Dust/Mist) Exposure Route No data available  
Inhalation (Vapor) Exposure Route No data available  
Inhalation (Gas) Exposure Route No data available  
Oral Exposure Route No data available  
Dermal Exposure Route No data available  
Inhalation (Dust/Mist) Exposure Route No data available  
Inhalation (Vapor) Exposure Route No data available  
Inhalation (Gas) Exposure Route No data available

**Ingredient Reproductive Toxicity Data**

Oral Exposure Route No data available  
Dermal Exposure Route No data available  
Inhalation (Dust/Mist) Exposure Route No data available  
Inhalation (Vapor) Exposure Route No data available  
Inhalation (Gas) Exposure Route No data available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Based on the classification principles, not classified as hazardous to the environment.

**Product Ecological Data**

**Aquatic toxicity**

Fish No data available  
Crustacea No data available  
Algae No data available

**Terrestrial toxicity**

Soil No data available  
Vertebrates No data available

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Invertebrates

No data available

**Ingredient Ecological Data**

**Aquatic toxicity**

**Fish**

If available, see ingredient data below

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Citric acid (40 - 50%) CAS#: 77-92-9	96 hours	<i>Lepomis macrochirus</i>	LC <sub>50</sub>	1516 mg/L	IUCLID (The International Uniform Chemical Information Database)
Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Citric acid (40 - 50%) CAS#: 77-92-9	48 hours	<i>Leuciscus idus Melanotus</i>	LC <sub>50</sub>	440 mg/L	IUCLID (The International Uniform Chemical Information Database)

**Crustacea**

If available, see ingredient data below

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Citric acid (40 - 50%) CAS#: 77-92-9	72 hours	<i>Daphnia magna</i>	EC <sub>50</sub>	120 mg/L	IUCLID (The International Uniform Chemical Information Database)

Algae

No data available

**Terrestrial toxicity**

Soil

No data available

Vertebrates

No data available

Invertebrates

No data available

**Other Information**

**Persistence and degradability**

None known.

**Product Biodegradability Data**

If available, see ingredient data below.

**Ingredient Biodegradability Data**

Test data reported below

Chemical Name	Test method	Biodegradation	Exposure time	Results
Citric acid (40 - 50%) CAS#: 77-92-9	None reported	None reported	None reported	Readily biodegradable

**Bioaccumulation**

Has the potential to bioaccumulate according to GHS criteria.

**Product Bioaccumulation Data**

If available, see ingredient data below.

**Ingredient Bioaccumulation Data**

No data available

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Chemical Name	Test method	Exposure time	Species	Bioconcentration factor (BCF)	Results
Citric acid (40 - 50%) CAS#: 77-92-9	None reported	None reported	None reported	None reported	Does not have the potential to bioaccumulate

**Additional information**

**Product Information**

Partition Coefficient (n-octanol/water) Not applicable

**Ingredient Information**

Chemical Name	Partition Coefficient (n-octanol/water)	Method
Citric acid (40 - 50%) CAS#: 77-92-9	log K <sub>ow</sub> = -1.64	No information available

**Mobility**

Mobility in soil: High mobility. If available, see ingredient data below.

**Product Information**

Soil Organic Carbon-Water Partition Coefficient Not applicable

**Ingredient Information**

Chemical Name	Soil Organic Carbon-Water Partition Coefficient	Method
Citric acid (40 - 50%) CAS#: 77-92-9	log K <sub>oc</sub> = -1.16	No information available

**Additional information**

**Water solubility**

**Product Information**

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

**Ingredient Information**

Chemical Name	Water solubility classification	Water solubility	Water solubility temperature °C	Water solubility temperature °F
Citric acid CAS#: 77-92-9	Completely soluble	750000 mg/L	25 °C	77 °F

**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>	Do not reuse container.
<b>US EPA Waste Number</b>	D002
<b>Special instructions for disposal</b>	Dilute material with excess water making a weaker than 5% solution. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

### 14. TRANSPORT INFORMATION

#### DOT

<b>UN/ID no</b>	UN3265
<b>Proper shipping name</b>	Corrosive liquid, acidic, organic, n.o.s (Citric Acid Solution)
<b>DOT Technical Name</b>	
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Emergency Response Guide Number</b>	153

#### TDG

<b>UN/ID no</b>	UN3265
<b>Proper shipping name</b>	Corrosive liquid, acidic, organic, n.o.s (Citric Acid Solution)
<b>TDG Technical Name</b>	
<b>Hazard Class</b>	8
<b>Packing Group</b>	III

#### IATA

<b>UN/ID no</b>	UN3265
<b>Proper shipping name</b>	Corrosive liquid, acidic, organic, n.o.s (Citric Acid Solution)
<b>IATA Technical Name</b>	
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>ERG Code</b>	153

#### IMDG

<b>UN/ID no</b>	UN3265
<b>IMDG Technical Name</b>	(Citric Acid Solution)
<b>Hazard Class</b>	8
<b>Packing Group</b>	III

**Note:** No special precautions necessary.

#### **Additional information**

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies. If the item is part of a reagent set or kit the classification would change to the following: UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III. If the item is not regulated, the Chemical Kit classification does not apply.

### 15. REGULATORY INFORMATION

#### National Inventories

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**TSCA** Complies  
**DSL/NDSL** Complies

**TSCA**- United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL**- Canadian Domestic Substances List/Non-Domestic Substances List

**International Inventories**

**EINECS/ELINCS** Complies  
**ENCS** Complies  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**TCSI** Complies  
**AICS** Complies  
**NZIoC** Complies

**EINECS/ELINCS**- European Inventory of Existing Chemical Substances/European 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  
**TCSI**- Taiwan Chemical Substances Inventory  
**AICS**- Australian Inventory of Chemical Substances  
**NZIoC**- New Zealand Inventory of Chemicals

**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 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**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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)

**CERCLA**

This material, as supplied, does not contain any 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

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

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

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U.S. EPA Label Information  
 EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

Additional information

Global Automotive Declarable Substance List (GADSL)  
 Not applicable

Special Comments  
 None

NFPA and HMIS Classifications

NFPA	Health hazards - 2	Flammability - 0	Instability - 0	Physical and Chemical Properties -
HMIS	Health hazards - 2	Flammability - 0	Physical hazards - 0	Personal protection - X - See section 8 for more information

Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH *Immediately Dangerous to Life or Health*  
 ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)  
 NDF *no data*

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
MAC	Maximum Allowable Concentration	Ceiling	Ceiling Limit Value
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

Prepared By Hach Product Compliance Department  
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 Revision Note None

Disclaimer

**USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site**

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safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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End of Safety Data Sheet

