



Safety Data Sheet

Preparation Date 02-Apr-2015

Revision date 06-Jul-2015

Revision Number: 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product Description: DECCO 314 Buffer Concentrate

Other means of identification

Item#: 24-314
Synonyms: Not Available

Recommended use of the chemical and restrictions on use

Recommended use: Acid buffer for Agclor 310.
Uses advised against: Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet

Manufacturer Address

DECCO
Decco U.S. Post Harvest, Inc.
1713 S. California Ave.
Monrovia, CA 91016-0120

Emergency telephone number

Company Phone Number: 626-358-1838
8:00 am - 5:00 pm (PST)
Emergency telephone number: Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

| | |
|-----------------------------------|------------|
| 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: Yellow

Physical state: liquid

Odor: odorless

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 continuously 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**

3. Composition/information on Ingredients

| Chemical name | CAS-No | Weight % | Trade secret |
|---------------|---------|----------|--------------|
| Citric acid | 77-92-9 | 1-80 | |

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures

FIRST AID MEASURES

| | |
|---------------------|---|
| Eye contact | Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. If symptoms persist, call a physician. |
| Skin contact | Rinse skin immediately with plenty of water for 15-20 minutes. If skin irritation persists, call a physician. |
| Inhalation | If breathing is irregular or stopped, administer artificial respiration. Call a poison control center or doctor for further treatment advice. |
| Ingestion | Clean mouth with water. Never give anything by mouth to an unconscious person. May produce an allergic reaction. Call a physician or poison control center for treatment advice. |

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects No information available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician No information available.

5. Fire-fighting measures

Suitable extinguishing media

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

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

No information available.

Hazardous combustion productsNo information available.

Explosion data

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 skin, eyes and clothing. Use personal protective equipment.

Environmental Precautions

Environmental precautions Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Methods and material for containment and cleaning up

Methods for Clean-Up Pick up and transfer to properly labelled containers.

7. Handling and Storage

Precautions for safe handling

Handling Keep out of reach of children. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Remove and wash contaminated clothing before re-use. Wear personal protective equipment.

Conditions for safe storage, including any incompatibilities

Storage Keep in a dry, cool and well-ventilated place. Store at temperatures below 90 F.

incompatible materials No information available.

8. Exposure Controls/Personal Protection

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering controls Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment

Eye/Face Protection

Avoid contact with eyes. Use eye protection to avoid eye contact. Goggles.

Skin protection

Protective gloves.

Respiratory protection

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection

programs must comply with 29 CFR 1910.134.

General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

| | | | |
|-----------------------|--------------------------|-------------|----------|
| Physical state | liquid | Odor | odorless |
| appearance | Yellow | | |
| color | No information available | | |

| <u>Property</u> | <u>VALUES</u> | <u>Remarks/ • Method</u> |
|---|--------------------------|--------------------------|
| pH | 2 | Approximately |
| Melting point/freezing point | No information available | |
| Boiling Point/Range | No information available | |
| Flash Point | No information available | |
| Evaporation Rate | No information available | |
| flammability (solid, gas) | No information available | |
| Flammability limit in air | | |
| Upper Flammability Limit | No information available | |
| Lower Flammability Limit | No information available | |
| vapor pressure | 21.90 mmHg @ 77 F | |
| Vapor Density | No information available | |
| Specific gravity | 1.240 @ 60 F | |
| Water solubility | No information available | |
| 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 | |
| Dynamic viscosity | No information available | |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |

OTHER INFORMATION

| | |
|-------------------------|--------------------------|
| Softening point | No information available |
| molecular weight | No information available |
| VOC Content | No information available |
| density | No information available |
| Bulk density | No information available |

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

incompatible materials

No information available.

Hazardous decomposition products

None under normal use.

11. Toxicological Information

Information on Likely Routes of Exposure

| | |
|---------------------|--|
| Inhalation | There is no data available for this product. |
| Eye contact | There is no data available for this product. |
| Skin contact | There is no data available for this product. |
| Ingestion | There is no data available for this product. |

Component Information

Citric acid

Single exposure studies indicate that this material is practically non-toxic if swallowed (rat LD50 6,730-11,700 mg/kg) moderately irritating to rabbit skin and severely irritating to rabbit eyes.

This material has been widely used in foods, beverages and pharmaceutical preparations. Occupational exposure has been reported to cause erosion of tooth enamel. Repeated administration in the diet of rats caused reduced weight gain, reductions in red blood cell counts and decreased organ weight of several organs. Long term dietary administration to two generations of rats showed no adverse effects on growth, reproduction, the blood or any organ; however, some increase in dental erosion was noted. A long-term feeding study in rats produced an increase in weight gain, but no evidence of organ pathology was obtained. No genetic changes were observed in tests using bacteria.

Information on Toxicological Effects

Symptoms No information available.

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

| | |
|---------------------------------|--|
| sensitization | No information available. |
| Mutagenic effects | No information available. |
| Carcinogenicity | There are no known carcinogenic chemicals in this product. |
| Reproductive effects | Not Available. |
| STOT - Single Exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |

Numerical Measures of Toxicity - No information available

12. Ecological Information

ecotoxicity

None known

Persistence/Degradability

No information available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

| Chemical name | Log Pow |
|------------------------|---------|
| Citric acid 77-92-9 | -1.72 |

Other Adverse Effects

No information available

13. Disposal Considerations

Waste Treatment Methods

| | |
|-------------------------------|--|
| Waste Disposal Method | Dispose of in accordance with all applicable federal, state, and local laws and regulations. |
| Contaminated packaging | Refer to product label. Do not re-use empty containers. |

14. Transport Information

| | |
|------------------------|---------------|
| <u>DOT</u> | NOT REGULATED |
| <u>TDG</u> | NOT REGULATED |
| <u>IATA</u> | NOT REGULATED |
| <u>IMDG/IMO</u> | NOT REGULATED |

15. Regulatory Information

International Inventories

| | |
|---------------------------|----------------|
| USINV | Not determined |
| DSL/NDSL | Not determined |
| EINECS/ ELINCS | Complies |
| ENCS | Complies |
| China | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |
| TSCA | Complies |

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

DSL/NDSL - 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

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 and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

| | |
|------------------------------|-----|
| Acute health hazard | yes |
| Chronic health hazard | NO |
| Fire hazard | No |

Sudden release of pressure hazard No
 Reactive Hazard No

CERCLARCRAPesticide Information

| Component | FIFRA - Restricted Use | FIFRA - Pesticide Product Other Ingredients | FIFRA - Listing of Pesticide Chemicals | California Pesticides - Restricted Materials |
|---------------------------------|------------------------|---|--|--|
| Citric acid 77-92-9 (1-80) | | | X | |

State Regulations

State Right-to-Know

International regulationsU.S. EPA Label information

EPA Pesticide registration number Not applied

| |
|------------------------------|
| 16. Other Information |
|------------------------------|

NFPA HEALTH 1 flammability 0 Instability 0 Physical hazard -

Preparation Date 02-Apr-2015

Revision date 06-Jul-2015

Revision Summary

Update Section 9 Update section 2 Update section 3

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