

## SDS Report

No. SHATY1607437202

Date: May. 10, 2016

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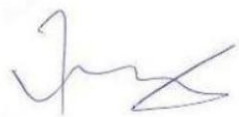
JMW SALES, INC. DBA Discover with Dr. Cool  
993 Siskiyou Blvd, Suite 1, Ashland, OR97520, USA

SGS Ref. No. : T51610200002RA; SHHL1604019524TY-SH  
Sample Name : Sodium bicarbonate  
End Uses : Educational Science Kit  
Composition/Ingredient of sample (as per client submission) : See section 3 Composition/information on ingredients on the SDS report  
Job Receiving Date : Apr 15, 2016  
Last Information Date : Apr 19, 2016  
SDS Preparation Period : Apr 15 ~ Apr 20, 2016

Service Requested : Preparation of Safety Data Sheet (SDS) for the sample with submitted information.

Summary : As per request, the contents and formats of the SDS are prepared in accordance with US Regulations Relating to Labor 29 CFR 1910.1200 (g), and is provided per attached.

Signed for and on behalf of  
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



Wei WANG, Terry  
Approved Signatory



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SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
Testing Center, Shanghai, China

3<sup>rd</sup> Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233  
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgs.com.cn  
HL: (86-21) 61402594 HL: (86-21) 54500353 e [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 05/10/2016

Reviewed on 04/19/2016

### 1 Identification

- **Product identifier**
- **Trade name:** Sodium bicarbonate
- **Recommended use of the chemical and restrictions on use**
- **Application of the substance / the preparation:** Educational Science Kit
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Manufacturer:  
 Discover Fun International (HK) Limited  
 Add: F 5, BLDG 561, Tong Long Second Rd, Torch Industrial District, Xiang'an, Xiamen, China  
 Tel: 0086-592-7260836  
 E-mail: discoverfun@163.com  
 Contact: Helen Chang
- **Buyer**  
 JMW SALES, INC. DBA Discover with Dr. Cool  
 993 Siskiyou Blvd, Suite 1, Ashland, OR97520, USA  
 Tel: (855) 437 2665  
 E-mail: jordan@discoverwithdrcool.com
- **Other US contact point:**  
 Jordan Willing JMW SALES, INC. DBA Discover with Dr. Cool  
 993 Siskiyou Blvd, Suite 1, Ashland, OR97520, USA  
 Tel: (855) 437 2665  
 E-mail: jordan@discoverwithdrcool.com
- **Further information obtainable from:** JMW SALES, INC. DBA Discover with Dr. Cool
- **Emergency telephone number:**  
 Helen Chang  
 Tel: 0592-7260835
- **Poison Center**  
 Tel: +1 800 222 1222
- **Reference Number:** T51610200002RA; SHHL1604019524TY-SH; SHATY1607437202

### 2 Hazard(s) identification

- **Classification of the substance or mixture**  
 The product is not classified according to OSHA Hazard Communication Standard (29 CFR 1910.1200)
  - **Information concerning particular hazards for human and environment:**  
 The product has not to be labeled due to the calculation procedure of OSHA Hazard Communication Standard (29 CFR 1910.1200).
  - **Classification system:**  
 The classification is according to the latest edition of OSHA Hazard Communication Standard (29 CFR 1910.1200), and extended by company and literature data.
- 
- **Label elements**
  - **Labelling according to OSHA Hazard Communication Standard (29 CFR 1910.1200)**
  - **Hazard pictograms** Not applicable
  - **Signal word** Not applicable
  - **Hazard-determining components of labeling:** Not applicable
  - **Hazard statements** Not applicable
  - **Precautionary statements** Not applicable
  - **Hazards not otherwise classified (HNOC)** No further relevant information available.

USA

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# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 05/10/2016

Reviewed on 04/19/2016

Trade name: Sodium bicarbonate

(Contd. of page 1)

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Composition:**

144-55-8	sodium hydrogencarbonate	80.0%
2611-82-7	trisodium 1-(1-naphthylazo)-2-hydroxynaphthalene-4',6,8-trisulphonate	20.0%

### 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Rinse out mouth with water.  
Never give anything by mouth to an unconscious person.  
Seek medical treatment.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
CO<sub>2</sub> extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Special protective equipment and precautions for firefighters**
- **Protective equipment:**  
Wear fully protective suit.  
Mouth respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Avoid formation of dust.  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
Avoid contact with eyes.  
Avoid contact with skin.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose contaminated material as waste according to item 13.

— USA —

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# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 05/10/2016

Reviewed on 04/19/2016

Trade name: Sodium bicarbonate

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### 7 Handling and storage

- **Precautions for safe handling:**
  - Thorough dedusting.
  - Ensure good ventilation/exhaustion at the workplace.
  - Keep receptacles tightly sealed.
  - Keep away from heat and direct sunlight.
  - Prevent formation of dust.
  - Avoid contact with skin and eyes.
  - For the general occupational hygienic measures refer to section 8.
- **Information about protection against explosions and fires:** Normal measures for preventive fire protection.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**
  - Store in a cool location.
  - Store only in the original receptacle.
- **Information about storage in one common storage facility:**
  - Store away from foodstuffs.
  - Store away from water.
  - Do not store together with acids.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

### 8 Exposure controls/personal protection

- **Components with limit values that require monitoring at the workplace:**
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure:**
- **Appropriate engineering controls:** See Section 7 for information about design of technical facilities.
- **Personal protective equipment:**
- **Breathing equipment:** Suitable respiratory protective device recommended.
- **Protection of hands:**
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
  - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
  - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

### 9 Physical and chemical properties

- **General Information**
- **Appearance:**
  - Form:** Powder
  - Color:** Red
- **Odor:** Odorless

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Reviewed on 04/19/2016

Trade name: Sodium bicarbonate

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· <b>Odor threshold:</b>	Not available
· <b>pH-value:</b>	Not available
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Not available.
<b>Freezing point:</b>	Not available
<b>Boiling point/Boiling range:</b>	Not available
· <b>Flash point:</b>	Not available
· <b>Flammability (solid, gaseous):</b>	Not available.
· <b>Auto-Ignition temperature:</b>	Not available
· <b>Decomposition temperature:</b>	Not available
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not available.
<b>Upper:</b>	Not available.
· <b>Vapor pressure:</b>	Not available
· <b>Density:</b>	Not available.
· <b>Relative density</b>	Not available.
· <b>Vapor density</b>	Not available
· <b>Evaporation rate</b>	Not available
· <b>Solubility in / Miscibility with Water:</b>	Not available
· <b>Partition coefficient (n-octanol/water):</b>	Not available
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not available
<b>Kinematic:</b>	Not available
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No decomposition if used according to specification.
- **Chemical stability** Stable under recommended storage conditions.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

144-55-8 sodium hydrogencarbonate

Oral LD50 4220 mg/kg (rat)

2611-82-7 trisodium 1-(1-naphthylazo)-2-hydroxynaphthalene-4',6,8-trisulphonate

Oral LD50 &gt;8000 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation:** Irritating effect possible.
- **Serious eye damage/irritation:** Irritating effect possible.

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**Trade name: Sodium bicarbonate**

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- **Respiratory or skin sensitisation:** Sensitization possible.

- **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:** Smaller quantities can be disposed of with household waste.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- **UN-Number**

- **DOT, IMDG, IATA** Not applicable

- **UN proper shipping name**

- **DOT, IMDG, IATA** Not applicable

- **Transport hazard class(es)**

- **DOT, IMDG, IATA**

- **Class** Not applicable

- **Packing group**

- **DOT, IMDG, IATA** Not applicable

- **Environmental hazards**

Not applicable.

- **Special precautions for user**

Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

- **Transport/Additional information:**

Not dangerous according to the above specifications.

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# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 05/10/2016

Reviewed on 04/19/2016

Trade name: Sodium bicarbonate

(Contd. of page 5)

· UN "Model Regulation":

-

### 15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

### 16 Other information

· \*\*\*\*\*

The contents and format of this SDS are in accordance with 29 CFR 1910.1200(g).

#### DISCLAIMER OF LIABILITY

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

· Date of preparation / last revision 05/10/2016 / -

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

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-USA-



**Safety Data Sheet**  
**29 CFR 1910.1200**

Printing date 05/10/2016

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**Trade name: Sodium bicarbonate**

(Contd. of page 6)

*LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**NIOSH: National Institute for Occupational Safety**OSHA: Occupational Safety & Health*

. \*\*\*\*\*

*End of document*

USA



## SDS Report

No. SHATY1607438802

Date: May. 10, 2016

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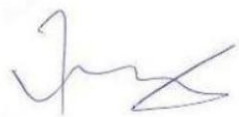
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993 Siskiyou Blvd, Suite 1, Ashland, OR97520, USA

SGS Ref. No. : T51610200006RA; SHHL1604019556TY-SH  
Sample Name : Citric Acid  
End Uses : Educational Science Kit  
Composition/Ingredient of sample (as per client submission) : See section 3 Composition/information on ingredients on the SDS report  
Job Receiving Date : Apr 15, 2016  
Last Information Date : Apr 19, 2016  
SDS Preparation Period : Apr 15 ~ Apr 20, 2016

Service Requested : Preparation of Safety Data Sheet (SDS) for the sample with submitted information.

Summary : As per request, the contents and formats of the SDS are prepared in accordance with US Regulations Relating to Labor 29 CFR 1910.1200 (g), and is provided per attached.

Signed for and on behalf of  
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



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Approved Signatory



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SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
Testing Center: 200233

3<sup>rd</sup> Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233  
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679 www.sgs.com.cn  
HL: (86-21) 61402594 HL: (86-21) 54500353 e [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

# Safety Data Sheet

## 29 CFR 1910.1200


Printing date 05/10/2016

Reviewed on 04/19/2016

### 1 Identification

- **Product identifier**
- **Trade name:** Citric Acid
- **Recommended use of the chemical and restrictions on use**
- **Application of the substance / the preparation:** Educational science kit
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Manufacturer:  
 Discover Fun International (HK) Limited  
 Add: F 5, BLDG 561, Tong Long Second Rd, Torch Industrial District, Xiang'an, Xiamen, China  
 Tel: 0086-592-7260836  
 E-mail: discoverfun@163.com  
 Contact: Helen Chang
- **Buyer**  
 JMW SALES, INC. DBA Discover with Dr. Cool  
 993 Siskiyou Blvd, Suite 1, Ashland, OR97520, USA  
 Tel: (855) 437 2665  
 E-mail: jordan@discoverwithdrcool.com
- **Other US contact point:**  
 Jordan Willing JMW SALES, INC. DBA Discover with Dr. Cool  
 993 Siskiyou Blvd, Suite 1, Ashland, OR97520, USA  
 Tel: (855) 437 2665  
 E-mail: jordan@discoverwithdrcool.com
- **Further information obtainable from:** JMW SALES, INC. DBA Discover with Dr. Cool
- **Emergency telephone number:**  
 Helen Chang  
 Tel: 0592-7260835
- **Poison Center**  
 Tel: +1 800 222 1222
- **Reference Number:** T51610200006RA; SHHL1604019556TY-SH; SHATY1607438802

### 2 Hazard(s) identification

- **Classification of the substance or mixture**  
 Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200)
  -  GHS07  
 Eye Irrit. 2A H319 Causes serious eye irritation.
  - **Information concerning particular hazards for human and environment:**  
 The product has to be labeled due to the calculation procedure of OSHA Hazard Communication Standard (29 CFR 1910.1200).
  - **Classification system:**  
 The classification is according to the latest edition of OSHA Hazard Communication Standard (29 CFR 1910.1200), and extended by company and literature data.
- 
- **Label elements**
  - **Labelling according to OSHA Hazard Communication Standard (29 CFR 1910.1200)**
  - **Hazard pictograms**



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USA

# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 05/10/2016

Reviewed on 04/19/2016

**Trade name: Citric Acid**

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- **Signal word** *Warning*
- **Hazard-determining components of labeling:** *Not applicable*
- **Hazard statements**  
*H319 Causes serious eye irritation.*
- **Precautionary statements**
  - P280 Wear eye protection / face protection.*
  - P264 Wash thoroughly after handling.*
  - 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.*
- **Hazards not otherwise classified (HNOC)** *No further relevant information available.*

### 3 Composition/information on ingredients

- **Chemical characterization:** *Substances*
- **CAS No. Description**  
*77-92-9 citric acid*
- **Identification number(s)**
- **EC number:** *201-069-1*
- **Remark :** *This product contains substance citric acid (CAS No.77-92-9) 100% by weight.*

### 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** *Supply fresh air; consult doctor in case of complaints.*
- **After skin contact:**  
*Immediately wash with water and soap and rinse thoroughly.*  
*If skin irritation continues, consult a doctor.*
- **After eye contact:**  
*Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*
- **After swallowing:**  
*Rinse out mouth with water.*  
*Never give anything by mouth to an unconscious person.*  
*Seek medical treatment.*
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed**  
*No further relevant information available.*

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
*CO<sub>2</sub> extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*
- **Special hazards arising from the substance or mixture** *No further relevant information available.*
- **Special protective equipment and precautions for firefighters**
- **Protective equipment:**  
*Wear fully protective suit.*  
*Mouth respiratory protective device.*

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**  
*Wear protective equipment. Keep unprotected persons away.*

(Contd. on page 3)

# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 05/10/2016

Reviewed on 04/19/2016

**Trade name: Citric Acid**

(Contd. of page 2)

Ensure adequate ventilation  
 Avoid formation of dust.  
 Use respiratory protective device against the effects of fumes/dust/aerosol.  
 Avoid contact with eyes.  
 Avoid contact with skin.

- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
 Pick up mechanically.  
 Dispose contaminated material as waste according to item 13.

## 7 Handling and storage

- **Precautions for safe handling:**  
 Thorough dedusting.  
 Ensure good ventilation/exhaustion at the workplace.  
 Keep receptacles tightly sealed.  
 Keep away from heat and direct sunlight.  
 Prevent formation of dust.  
 Avoid contact with skin and eyes.  
 For the general occupational hygienic measures refer to section 8.
- **Information about protection against explosions and fires:** Normal measures for preventive fire protection.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**  
 Store in a cool location.  
 Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**  
 Keep receptacle tightly sealed.  
 Store in cool, dry conditions in well sealed receptacles.

## 8 Exposure controls/personal protection

- **Components with limit values that require monitoring at the workplace:**  
 The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure:**
- **Appropriate engineering controls:**  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes and skin.  
 See Section 7 for information about design of technical facilities.
- **Personal protective equipment:**
- **Breathing equipment:** Suitable respiratory protective device recommended.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 4)

# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 05/10/2016

Reviewed on 04/19/2016

**Trade name: Citric Acid**

(Contd. of page 3)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

### 9 Physical and chemical properties

· **General Information**

· **Appearance:**

Form: Granular crystal

Color: White

· **Odor:** Odorless

· **Odor threshold:** Not available

· **pH-value:** Not available

· **Change in condition**

Melting point/Melting range: Not available.

Freezing point: Not available

Boiling point/Boiling range: Not available

· **Flash point:** Not available

· **Flammability (solid, gaseous):** Not available

· **Auto-Ignition temperature:** Not available

· **Decomposition temperature:** Not available

· **Explosion limits:**

Lower: Not available.

Upper: Not available.

· **Vapor pressure:** Not available

· **Density:** Not available.

· **Relative density** Not available.

· **Vapor density** Not available

· **Evaporation rate** Not available

· **Solubility in / Miscibility with**

Water: Not available

· **Partition coefficient (n-octanol/water):** Not available

· **Viscosity:**

Dynamic: Not available

Kinematic: Not available

· **Other information** No further relevant information available.

USA

(Contd. on page 5)

# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 05/10/2016

Reviewed on 04/19/2016

Trade name: Citric Acid

(Contd. of page 4)

### 10 Stability and reactivity

- **Reactivity** No decomposition if used according to specification.
- **Chemical stability** Stable under recommended storage conditions.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

77-92-9 citric acid

Oral	LD50	5040 mg/kg (mouse)
		3000 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation:** Irritating effect possible.
- **Serious eye damage/irritation:** Irritating effect.
- **Respiratory or skin sensitisation:** Sensitization possible.
- **Additional toxicological information:**  
The product shows the following dangers according to substances:  
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

Substance is not listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 6)

USA

# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 05/10/2016

Reviewed on 04/19/2016

**Trade name:** Citric Acid

(Contd. of page 5)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- |  |  |
|--|--|
| · <b>UN-Number</b>   |  |
| · <b>DOT, IMDG, IATA</b>   | Not applicable                                       |
| · <b>UN proper shipping name</b>   |  |
| · <b>DOT, IMDG, IATA</b>   | Not applicable                                       |
| · <b>Transport hazard class(es)</b>  |  |
| · <b>DOT, IMDG, IATA</b>   |  |
| · <b>Class</b>   | Not applicable                                       |
| · <b>Packing group</b>   |  |
| · <b>DOT, IMDG, IATA</b>   | Not applicable                                       |
| · <b>Environmental hazards</b>   | Not applicable.                                      |
| · <b>Special precautions for user</b>  | Not applicable.                                      |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>                                       | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | -  |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

Substance is not listed.

- **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

- **TSCA (Toxic Substances Control Act):**

Substance is listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

- **Chemicals known to cause developmental toxicity:**

Substance is not listed.

- **Carcinogenicity categories**

- **EPA (Environmental Protection Agency)**

Substance is not listed.

- **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

(Contd. on page 7)



# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 05/10/2016

Reviewed on 04/19/2016

**Trade name: Citric Acid**

(Contd. of page 6)

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

### 16 Other information

. \*\*\*\*\*

The contents and format of this SDS are in accordance with 29 CFR 1910.1200(g).

#### DISCLAIMER OF LIABILITY

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

· **Date of preparation / last revision** 05/10/2016 / -

#### · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety &amp; Health

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

. \*\*\*\*\*

End of document

USA

## Safety Data Sheet

# Reb cabbage powder

Version : V2.0.0.1

Report No. : HGNM20TJY5

Creation Date : 2020/08/11

Revision Date : 2020/08/11

\*Prepared according to American OSHA HazCom Standard (2012)

## 1 Identification

### Product identifier

Product Name	Reb cabbage powder
CAS No.	89958-13-4
EC No.	289-635-4
Molecular Formula	-

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

Relevant identified uses	Mainly used as indicator in scientific suits.
Uses advised against	Industrial use only.

### Details of the supplier of the Safety Data Sheet

Name of the company	JMW SALES,INC.DBA DISCOVER WITH DR.COOL
Address of the company	340 A STREET, SUITE1, ASHLAND, OR 97520
Post code	—
Telephone number	+1 ( 541 ) 708-6741-107
Fax number	—
E-mail address	jhoffner@jmwsales.com

### Emergency phone number

Emergency phone number	+1 800 222 1222
------------------------	-----------------

## 2 Hazard(s) identification

### Hazard classification according to GHS

Eye Damage/Irritation	Category 2A
-----------------------	-------------

### GHS Label elements

Hazard pictograms	
Signal word	Warning

### Hazard statements

H319	Causes serious eye irritation
------	-------------------------------

### Precautionary statements

- ◆ Prevention

<b>P264</b>	Wash face and hands thoroughly after handling.
<b>P280</b>	Wear protective gloves/protective clothing/eye protection/face protection.

## ◆ Response

<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
-----------------------	--

## ◆ Storage

<b>Storage</b>	Not applicable
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## ◆ Disposal

<b>Disposal</b>	Not applicable
-----------------	----------------

## | Other hazards

	Not applicable.
--	-----------------

## | Hazard description

## ◆ Physical and chemical hazards

	Solid, toxic smoke/fumes in a fire.
--	-------------------------------------

## ◆ Health hazards

<b>Inhaled</b>	Inhalation of the product may produce adverse health effects or irritation of the respiratory tract following discomfort.
<b>Ingestion</b>	Accidental ingestion of the product may be harmful to the health of the individual.
<b>Skin Contact</b>	Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
<b>Eye</b>	This product may cause serious eye irritation. Severe inflammation may be expected with pain following direct contact with the eye.

## ◆ Environmental hazards

	Please refer to 12th chapter of SDS.
--	--------------------------------------

## 3 Composition/information on ingredients

## | Substance/mixture

	Substance
--	-----------

Component	CAS No.	EC No.	Concentration (wt, %)
Reb cabbage powder	89958-13-4	289-635-4	100

## 4 First-aid measures

## | Description of first aid measures

<b>General advice</b>	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
<b>Skin contact</b>	No harm in general situation. First aid is not needed.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Call a physician immediately.
<b>Inhalation</b>	Move victim into fresh air. If breathing is difficult, give oxygen and consult a physician immediately.

**Protecting of first-aiders**

Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

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

- |   |                        |
|---|------------------------|
| 1 | Please see section 11. |
|---|------------------------|

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

- |   |                          |
|---|--------------------------|
| 1 | Treat symptomatically.   |
| 2 | Symptoms may be delayed. |

**5 Fire-fighting measures****Extinguishing media**

<b>Suitable extinguishing media</b>	Use extinguishing media suitable for surrounding area.
<b>Unsuitable extinguishing media</b>	There is no restriction on the type of extinguisher which may be used.

**Specific hazards arising from the substance or mixture**

- |   |   |
|---|---|
| 1 | Development of hazardous combustion gases or vapor possible in the event of fire. |
| 2 | Not considered a significant fire risk, however containers may burn.              |

**Special protective equipment and precautions for fire-fighters**

- |   |  |
|---|--|
| 1 | As in any fire, wear self-contained breathing apparatus ( MSHA/NIOSH approved or equivalent) and full protective gear. |
| 2 | Fight fire from a safe distance, with adequate cover.  |
| 3 | Prevent fire extinguishing water from contaminating surface water or the ground water system.                          |

**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

- |   |   |
|---|---|
| 1 | Ensure adequate ventilation. Remove all sources of ignition.                      |
| 2 | Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. |
| 3 | Use personal protective equipment. Avoid breathing mist or dust.                  |

**Environmental precautions**

- |   |   |
|---|---|
| 1 | Prevent further leakage or spillage if safe to do so. |
| 2 | Discharge into the environment must be avoided.       |

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

- |   |  |
|---|--|
| 1 | Use clean, non-sparking tools to collect absorbed material.  |
| 2 | Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. |
| 3 | Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.         |

**7 Handling and storage****Precautions for safe handling**

- |   |   |
|---|---|
| 1 | Handling is performed in a well ventilated place.     |
| 2 | Avoid contact with eyes.                              |
| 3 | Keep away from heat/sparks/open flames/ hot surfaces. |

4	Avoid inhalation of dust or mist.
---	-----------------------------------

### Conditions for safe storage, including any incompatibilities

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

## 8 Exposure controls/personal protection

### Control parameters

<b>Occupational Exposure limit values</b>	No relevant regulations
---	-------------------------

#### ◆ Biological limit values

<b>Biological limit values</b>	No relevant regulations
--------------------------------	-------------------------

#### ◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 300.1~GBZ/T 300.160-2017; GBZ/T 300.161~GBZ/T 300.164-2018 Determination of toxic substances in workplace air (Series standard).

### Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Set up emergency exit and necessary risk-elimination area.
4	Handle in accordance with good industrial hygiene and safety practice.

### Personal protection equipment

<b>General requirement</b>	
<b>Eye protection</b>	Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US)).
<b>Hand protection</b>	Wear protective gloves ( such as butyl rubber ), passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.
<b>Respiratory protection</b>	In general situation, respiratory protection is not needed. If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
<b>Skin and body protection</b>	Wear chemical protective clothing.

## 9 Physical and chemical properties and safety characteristics

### Physical and chemical properties

<b>Appearance</b>	Solid
<b>Odor</b>	No information available
<b>Odor threshold</b>	No information available
<b>pH</b>	No information available

<b>Melting point/freezing point(°C)</b>	No information available
<b>Initial boiling point and boiling range(°C)</b>	No information available
<b>Flash point(Closed cup, °C)</b>	Not applicable
<b>Evaporation rate</b>	Not applicable
<b>Flammability</b>	Not flammable
<b>Upper/lower explosive limits[%(v/v)]</b>	Upper limit : No information available ; Lower limit : No information available
<b>Vapor pressure</b>	Not applicable
<b>Vapor density(Air = 1)</b>	Not applicable
<b>Relative density(Water=1)</b>	No information available
<b>Solubility</b>	No information available
<b>n-octanol/water partition coefficient</b>	No information available
<b>Auto-ignition temperature(°C)</b>	No information available
<b>Decomposition temperature(°C)</b>	No information available
<b>Viscosity</b>	Not applicable

## 10 Stability and reactivity

### | Stability and reactivity

<b>Reactivity</b>	Contact with incompatible substances can cause decomposition or other chemical reactions.
<b>Chemical stability</b>	Stable under proper operation and storage conditions.
<b>Possibility of hazardous reactions</b>	No information available.
<b>Conditions to avoid</b>	Incompatible materials, heat, flame and spark.
<b>Incompatible materials</b>	No information available.
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 Toxicological information

### | Acute toxicity

<b>Acute toxicity</b>	No information available
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### | Carcinogenicity

<b>Component</b>	<b>List of carcinogens by the IARC Monographs</b>	<b>Report on Carcinogens by NTP</b>
<b>Reb cabbage powder</b>	Not Listed	Not Listed

### | Others

<b>Reb cabbage powder(Component)</b>	
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met
<b>Serious eye damage/irritation</b>	Causes serious eye irritation(Category 2A)
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met

<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met
<b>STOT-single exposure</b>	Based on available data, the classification criteria are not met
<b>STOT-repeated exposure</b>	Based on available data, the classification criteria are not met
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met
<b>Reproductive toxicity(additional)</b>	Based on available data, the classification criteria are not met

## 12 Ecological information

### | Acute aquatic toxicity

<b>Acute aquatic toxicity</b>	No information available
-------------------------------	--------------------------

### | Chronic aquatic toxicity

<b>Chronic aquatic toxicity</b>	No information available
---------------------------------	--------------------------

### | Persistence and degradability

<b>Persistence and degradability</b>	No information available
--------------------------------------	--------------------------

### | Bioaccumulative potential

<b>Bioaccumulative potential</b>	No information available
----------------------------------	--------------------------

### | Mobility in soil

<b>Mobility in soil</b>	No information available
-------------------------	--------------------------

### | Results of PBT and vPvB assessment

<b>Component</b>	<b>Results of PBT and vPvB assessment [according to (EC) No 1907/2006]</b>
<b>Reb cabbage powder</b>	not PBT/vPvB

## 13 Disposal considerations

### | Disposal considerations

<b>Waste chemicals</b>	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
<b>Contaminated packaging</b>	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
<b>Disposal recommendations</b>	Refer to section waste chemicals and contaminated packaging.

## 14 Transport information

### | Label and Mark

<b>Transporting Label</b>	Not applicable
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### | IMDG-CODE

<b>IMDG-CODE</b>	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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### | IATA-DGR

<b>IATA-DGR</b>	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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## UN-ADR

UN-ADR NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

## 15 Regulatory information

## International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Reb cabbage powder	✓	×	×	×	×	✓	×	✓	×

[EINECS]	European Inventory of Existing Commercial Chemical Substances
[TSCA]	United States Toxic Substances Control Act Inventory
[DSL]	Canadian Domestic Substances List
[IECSC]	China Inventory of Existing Chemical Substances
[NZIoC]	New Zealand Inventory of Chemicals
[PICCS]	Philippines Inventory of Chemicals and Chemical Substances
[KECI]	Existing and Evaluated Chemical Substances
[AICS]	Australia Inventory of Chemical Substances
[ENCS]	Existing And New Chemical Substances

Note:

- “✓” Indicates that the substance included in the regulations.  
 “×” No data or not included in the regulations.

## 16 Other information

## Information on revision

Creation Date	2020/08/11
Revision Date	2020/08/11
Reason for revision	-

## Reference

- [1] IPCS: The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>.
- [2] IARC, website: <http://www.iarc.fr/>.
- [3] OECD: The Global Portal to Information on Chemical Substances, website: <https://www.echemportal.org/echemportal/substancesearch/index.action>.
- [4] CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.
- [5] NLM: ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.
- [6] EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.
- [7] U.S. Department of Transportation: ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.
- [8] Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

## Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG	International Maritime Dangerous Goods
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC <sub>50</sub>	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD <sub>50</sub>	Lethal Dose 50%	NTP	National Toxicology Program
EC <sub>50</sub>	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
EC <sub>x</sub>	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
P <sub>OW</sub>	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment

**Disclaimer**

This Safety Data Sheet (SDS) was prepared according to OSHA HazCom Standard (2012). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.