



## MATERIAL SAFETY DATA SHEET

### 1. Product Identification

Chemical Product name : Citric Acid  
Trade Name : Citric Acid  
Product Code (supplier) : 01\*\* \*\*\*  
Supplier : Gadot Biochemical Industries Ltd.  
117-119 Hahistadrut Rd., POB 10636  
Haifa Bay 26118, Israel.  
Telephone number emergencies : 972 4 8461 555

### 2. Composition / Information about dangerous components

Substances / Preparation : Substances.

Chemical Name	CAS Number	EG number	E-No.	R-sentences
2 Hydroxy Propane Tricarboxylic Acid	77-92-9	201-069-1	E-330	

### 3. Hazards Identification

Physical / Chemical Risks : None  
Environmental Risks : None/biologically degradable.  
Health Risks : None known.

### 4. First Aid Measures

#### Effects and Symptoms

After swallowing : Large quantities may cause nausea, vomiting, cramps, and produce acidic irritation of mouth and throat  
After inhalation : Coughing, sneezing and labored breathing.  
After skin contact : Irritation.  
After eye contact : Irritation.  
General : Irritation. Some allergic reactions.



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### First Aid Measures

- After swallowing** : Give 2-3 glasses of water or milk to drink Induce vomiting. Get medical attention.
- Inhalation** : Remove to fresh air. If not breathing, administer cardio-pulmonary resuscitation or artificial respiration. Get medical attention
- Skin contact** : **Rinse with water and soap.**
- Eye contact** : **Rinse with water. Get medical attention**

## **5. Fire Fighting Measures**

### Extinguishing agents

- Suitable** : **Not combustible. Use appropriate extinguishing media for material that is supplying fuel.**
- Unsuitable** : -
- Specific measures** : -
- Unusual fire/explosion risks** : **Acidic product.**
- Dangerous thermic decomposition and combustion products** :
- Protection of fire fighting crews** : Protective clothes.

## **6. Accidental Release Measures**

- Personal protection measures** : **Protection of eyes.**
- Environmental protection measures** : **Dike area to prevent run-off an contamination of water sources.**
- Cleaning methods** : **With mechanical means and/or flush with water.**



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### 7. Handling and Storage

**Handling** : No specific requirements.

**Storage** : Avoid humidity and high temperatures. Note that material is slightly hygroscopic.

#### Packing Measures

**Suitable** : Polyethylene-lined bags, drums, big bags, etc.

### 8. Exposure Control and Personal Protection

**Technical Exposure control** : -

**Hygienic measures** : Dust masks.

#### Upper professional exposure limits

##### Chemical Name

"TLV" (USA) :

"MAK"(Germany) :

##### Personal protection measures

**Breathing equipment** : Dust masks.

**Skin and body** : Clothes.

**Hands** : Gloves.

**Eyes** : Safety glasses.

### 9. Physical and Chemical Properties:

**Appearance** : Dry granulates.

**Colour** : White.

**Smell** : No unusual odour.

**Boiling \ Melting point** : Solid.

**pH** : (5% solution) - 1.8

**Solubility in water** : 162 gr./100 ml/ at 25° C



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Vapor pressure (air = 1)	: Practically zero
Vapor density (air = 1)	: 6.8
Flash point	: Not combustible.
Ignition temperature	: 1011 degrees Celsius
Lower explosion limit	: -280
Upper explosion limit	: -2290

### **10. Stability and Reactivity**

Stability	: Stable.
Circumstances to be avoided	: -
Substances to be avoided	: May react vigorously with strong and concentrated bases.
Dangerous decomposition products	: Not known.

### **11. Toxicological Information**

Chemical Name	:
<u>Acute toxicity</u>	IVN-RBT LD50 330 mg kg <sup>-1</sup>
Oral	: ORL-RAT LD50 11700 mg kg <sup>-1</sup> ORL-MUS LD50 5040 mg kg <sup>-1</sup> ORL-RBT LDLO 7000 mg kg <sup>-1</sup>
Dermal	: IPR-RAT LD50 883 mg kg <sup>-1</sup> SCU-RAT LDLO 7000 mg kg <sup>-1</sup>
Breathing wise	:
Eye effects	: Causes irritation.
Skin effects	: May cause irritation.
Sensitivity	:
Chronic Toxicity	:
Carcinogenicity	: None known.



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### **12. Ecological Information**

Ecological details of substance are not available.

Chemical Name :

Ecotoxicity :

Exotoxicity :

### **13. Instructions for Disposal**

Disposal methods :

### **14. Transport Information**

UN Number :

#### Road & Rail Transport

ADR/RID Class :

ADR/RID Class :

#### Inland waterways

ADNR Class :

#### Sea transport

IMDG Page number :

#### Air Transport

IATA Class :

National transport laws :



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### **15. Legally Required Information**

Danger designation :  
Safety phrases :  
Risk phrases :  
\*National Regulations :

### **16. Other Information**

#### History

Date of first issue : 10.03.96  
Date of last issue : -  
Date of issue : June 5<sup>th</sup>, 2007  
MSDS composed by : Mr. Nissim Guigui  
Quality Assurance Manager  
Gadot Biochemical Industries Ltd  
Haifa / Israel.  
On behalf of: Gadot Biochemical Industries Ltd

#### Warranty

This information herein given in good faith and to the best of our knowledge. Since we have no control over the use of the product, we make no warrantee or representation, expressed or implied, other than that it conforms to the chemical description on its label. No agent, representative or employee of Gadot Biochemical Industries Ltd. is authorized to change any terms of this notice.