



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com) Website: [www.wbcil.com](http://www.wbcil.com)

## Section 1 - Chemical Product and Company Identification

**1.1 MSDS Name:** Magnesium Citrate USP

**1.2 Product Code:** MGCUS14

**1.3 Relevant identified uses of the substance or mixture and uses advised against:**

Relevant identified uses: Laboratory and analytical use Laboratory chemical, Medication.

Dietary supplement. In pharmaceuticals.

**1.4 Company Identification:**

WEST BENGAL CHEMICAL INDUSTRIES LIMITED 145/1, Jessore Road, Lake Town, Kolkata – 700

089, India. Phone: +91 33 4025 1700 Fax: +91 33 2574 7410 Website: [www.wbcil.com](http://www.wbcil.com) Email:

[wbcil@wbcil.com](mailto:wbcil@wbcil.com)

## Section 2 – Hazards Information

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP]

2.1.1 Hazard classification

Serious eye damage/eye irritation, Category 2

Skin corrosion/irritation, Category 2

**2.2 Signal word:**

Warning

**2.3 Hazard statements:**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

**2.4 Precautionary statements:**

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

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

**2.5 Inhalation:**

May cause respiratory irritation

**2.6 Ingestion:**

May cause gastrointestinal irritation

**2.7 Skin contact:**

May cause skin irritation



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

### 2.8 Eye contact:

May cause eye irritation

### 2.9 Chronic exposure:

No known significant effects or critical hazards

### 2.10 Pictogram



### 2.11 NFPA rating:



NFPA SCALE (0-4)

### 2.12 HMIS rating:

Health	1
Flammability	1
Physical Hazard	0
Personal protection	E

HMIS RATINGS (0-4)

## Section 3 – Composition/Information on Ingredients

**3.1 Ingredient Name:** Magnesium Citrate USP

**3.2 Synonym:** Citrate of magnesia, Triagemagnesium dicitrate

**3.3 CAS Number:** 3344-18-1

**3.4 EC No:** 222-093-9

**3.5 Molecular weight:** 451.12 g/mol

**3.6 Molecular structure:**  $C_{12}H_{10}Mg_3O_{14}$



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

3.7 % wt: 100

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures:

#### 4.1.1 General notes

Take off contaminated clothing.

#### 4.1.2 Inhalation

Move exposed person to fresh air. If not breathing, seek immediate medical attention. If breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel and seek medical attention.

#### 4.1.3 Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek medical attention.

#### 4.1.4 Skin contact

Remove contaminated clothing and shoes and immediately flush skin with plenty of water for at least 15 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse. If irritation persists, seek medical attention.

#### 4.1.5 Eye contact

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

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

#### 4.2.1 Symptoms/injuries after inhalation

May cause respiratory irritation.

#### 4.2.2 Symptoms/injuries after skin contact

Causes skin irritation.

#### 4.2.3 Symptoms/injuries after eye contact

Causes serious eye irritation

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

Treat symptomatically



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

## Section 5 - Fire-Fighting Measures

### 5.1 Extinguishing media:

#### 5.1.1 Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings! water, foam, alcohol resistant foam, dry extinguishing powder, ABC-powder

#### 5.1.2 Unsuitable extinguishing media

water jet

### 5.2 Hazardous combustion products:

These products are carbon oxides (CO, CO<sub>2</sub>). Some metallic oxides.

### 5.3 Flammability of the product:

May be combustible at high temperature.

### 5.4 Explosion hazards in presence of carious substances:

Slightly explosive in presence of open flames and sparks. Nonexplosive in presence of shocks.

### 5.5 Fire hazards in presence of various substances:

Slightly flammable to flammable in presence of heat. Nonflammable in presence of shocks.

### 5.6 Special hazards arising from the substance or mixture Hazardous combustion products:

Under fire conditions, hazardous fumes will be present.

### 5.7 Advice for fire-fighters Protection against fire:

Do not enter fire area without proper protective equipment, including respiratory protection.

### 5.8 Special information:

Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

## Section 6 - Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures:

#### 6.1.1 For emergency responders

Equip cleanup crew with proper protection. Ventilate area.

#### 6.1.2 For non-emergency personnel

Avoid dust formation. Avoid breathing vapours, mist or gas.

### 6.2 Environmental precautions:

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

### 6.3 Methods and material for containment and cleaning up:

#### 6.3.1 Advice on how to contain a spill



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

## Section 6 - Accidental Release Measures

Covering of drains. Take up mechanically.

6.3.2 Advice on how to clean up a spill

Take up mechanically.

### 6.4 Other information relating to spills and releases:

Place in appropriate containers for disposal. Ventilate affected area.

6.4.1 Small spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

6.4.2 Large spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents.

### 7.2 Advice on general occupational hygiene:

Keep away from food, drink and animal feeding stuffs.

### 7.3 Storage:

Keep container tightly closed. Keep container in a cool, well ventilated area

7.3.1 Conditions to avoid

Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3.2 Specific designs for storage rooms or vessels Recommended storage temperature

15 – 25 °C

7.3.3 Storage class (TRGS 510): 13: Non Combustible Solids

### 7.4 Specific end use(s):

No information available.

## Section 8 - Exposure Controls / Personal Protection



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

### 8.1 Engineering controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne Contaminants below the exposure limit.

### 8.2 Personal protection:

Safety glasses, Lab Coat, Dust respirator, Be sure to use an approved / certified respirator or equivalent, Gloves.

#### 8.2.1 Eye/face protection

Use safety goggle with side protection.

#### 8.2.2 Skin and hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

type of material NBR (Nitrile rubber)

material thickness >0,11 mm

breakthrough times of the glove material >480 minutes (permeation: level 6)

Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

#### 8.2.3 Respiratory protection

Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).

### 8.3 Environmental exposure controls:

Keep away from drains, surface and ground water.

### 8.4 Personal protection in case of large spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### 8.5 Exposure limits:

Not available.

## Section 9 - Physical and Chemical Properties

<b>Appearance:</b>	White free flowing powder
<b>Odour:</b>	Odorless.
<b>Odour threshold:</b>	No data available
<b>pH:</b>	6 - 7.5 at 0,61 g/l at 25 °C



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

<b>Relative evaporation rate (butylacetate=1):</b>	No data available
<b>Melting point:</b>	184 °C
<b>Freezing point:</b>	No data available
<b>Boiling point:</b>	No data available
<b>Flash point:</b>	No data available
<b>Auto-ignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Flammability (solid, gas):</b>	No data available
<b>Vapour pressure:</b>	No data available
<b>Relative vapour density at 20 °C:</b>	No data available
<b>Relative density:</b>	No data available
<b>Solubility:</b>	~250 g /l at 100 °C (in water)
<b>Log Pow:</b>	No data available
<b>Viscosity, kinematic:</b>	No data available
<b>Viscosity, dynamic:</b>	No data available
<b>Explosive properties:</b>	No data available
<b>Oxidizing properties:</b>	No data available
<b>Explosive limits:</b>	No data available

## Section 10 - Stability and Reactivity

### 10.1 Reactivity:

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

### 10.2 Stability:

The product is stable at normal conditions.

### 10.3 Instability Temperature:

Not available

### 10.4 Conditions of Instability:

Excess heat, dust generation, incompatible materials.

### 10.5 Conditions to avoid:

Direct sunlight. Extremely high or low temperatures.

### 10.6 Incompatible materials:

Strong acids. Strong bases oxidizing agents.

### 10.7 Hazardous decomposition products:

Fumes. Carbon monoxide. Carbon dioxide. Magnesium oxide fumes

### 10.8 Hazardous Polymerization:



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

## Section 10 - Stability and Reactivity

Does not occur

### 10.9 Corrosivity:

Non-corrosive in presence of glass.

### 10.10 Special remarks on Reactivity:

Not available

### 10.11 Special remarks on Corrosivity:

Not available

### 10.12 Polymerization: Will not occur.

## Section 11 - Toxicological Information

### 11.1 Routes of Entry:

Inhalation, Ingestion

### 11.2 Toxicity to Animals:

LD50: Not available. LC50: Not available.

### 11.3 Chronic Effects on Humans:

Not Available

### 11.4 Other Toxic Effects on Humans:

Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

### 11.5 Special Remarks on Toxicity to Animals:

Not Available

### 11.6 Special Remarks on Chronic Effects on Humans:

Not Available

### 11.7 Sensitization:

Based on available data, the classification criteria are not met.

### 11.8 Mutagenicity:

Based on available data, the classification criteria are not met.

### 11.9 Carcinogenicity:

Based on available data, the classification criteria are not met.

### 11.10 Toxic for reproduction:

Based on available data, the classification criteria are not met.

### 11.11 STOT-single exposure:

Based on available data, the classification criteria are not met





WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

## Section 11 - Toxicological Information

### 11.12 STOT-repeated exposure:

Based on available data, the classification criteria are not met.

### 11.13 Aspiration hazard:

Based on available data, the classification criteria are not met

### 11.14 Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

Skin: Contact may cause irritation or rash, particularly with moist skin.

Eyes: Dust may cause irritation (abraisin) by mechanical action and cause redness, and tearing.

Inhalation: Inhalation high concentrations of dust may cause nasal or lung irritation.

Ingestion: Ingestion can produce gastrointestinal tract irritation. Can cause diarrhea.

## Section 12 - Ecological Information

### 12.1 Ecotoxicity:

Not Available

### 12.2 BOD 5 and COD:

Not Available

### 12.3 Products of biodegradation:

Possibly hazardous short-term degradation products are not likely. However, long term degradation products may arise.

### 12.4 Toxicity of the products of biodegradation:

The Product itself and its products of degradation are not toxic.

### 12.5 Persistence and degradability:

Theoretical Oxygen Demand

0,5969 mg/mg Theoretical Carbon Dioxide: 1,232 mg/mg

### 12.6 Bioaccumulative potential:

Data are not available.

### 12.7 Mobility in soil:

Data are not available.

### 12.8 Results of PBT and vPvB assessment:

Data are not available.

### 12.9 Endocrine disrupting properties:

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

### 12.10 Special remarks on the products of biodegradation:



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

Not Available

## Section 13 - Disposal Considerations

### 13.1 Waste treatment methods

Consult the appropriate local waste disposal expert about waste disposal.

### 13.2 Sewage disposal-relevant information

Do not empty into drains.

### 13.3 Waste treatment of containers/packagings

Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

### 13.4 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

## Section 14 - Transport Information

### 14.1 UN number

UN-No. (ADR) : Not Applicable

UN-No. (IMDG) : Not Applicable

UN-No. (IATA) : Not Applicable

UN-No. (ADN) : Not Applicable

UN-No. (RID) : Not Applicable

### 14.2 UN proper shipping name:

Proper Shipping name (ADR) : Not Applicable

Proper Shipping name (IMDG) : Not Applicable

Proper Shipping name (IATA) : Not Applicable

Proper Shipping name (ADN) : Not Applicable

Proper Shipping name (RID) : Not Applicable

### 14.3 Transport Hazard Class(es):

#### ADR

Transport hazard class(es) (ADR) : Not applicable

#### IMDG

Transport hazard class(es) (IMDG) : Not applicable



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

#### **IATA**

Transport hazard class(es) (IATA) : Not applicable

#### **ADN**

Transport hazard class(es) (ADN) : Not applicable

#### **RID**

Transport hazard class(es) (RID) : Not applicable

#### **14.4 Packing Group**

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

Packing group (ADN) : Not applicable

Packing group (RID) : Not applicable

#### **14.5 Environmental hazards**

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

#### **14.6 Special precautions for User:**

Overland transport : No data available

Transport by Sea : No data available

Air transport : No data available

Inland waterway transport : No data available

Rail transport : No data available

#### **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC**

Code: Not applicable

**14.8 D O T Classification:** Not a DOT controlled material

**14.9 Air transport Goods:** Nonhazardous/non dangerous as per IATA DGR.

**14.10 Special Provision for Transport:** Not applicable

**14.11 IATA Specification :** Non-dangerous, non-hazardous

#### **14.12 DOT (Pictograms)**

AS PER IATA REGULATION SAFE FOR CARRAGE, NON-HAZARDOUS AND NON-RESTRICTED.

NO SPECIAL LABELLING OR TRANSPORT MEASURE HAVE BEEN IDENTIFIED.



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com)

Website: [www.wbcil.com](http://www.wbcil.com)

THIS IS NOT REGULATED AS PER IATA REGULATION



## Section 15 - Regulatory Information

### 15.1 Federal and state regulation:

No information available.

### 15.2 Other regulations:

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

### 15.3 WHMIS (Canada):

Not controlled under WHMIS (Canada).

### 15.4 DSCL (EEC):

This product is not classified according to the EU regulations. Not applicable.

### 15.5 HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

### 15.6 National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 1

Reactivity: 0

## Section 16 - Other Information

**Disclaimer:**  
only.

This material safety data sheet is provided as an information resource

WEST BENGAL CHEMICAL INDUSTRIES LIMITED believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to verify its validity. The buyer assumes all responsibility of using and handling the product in accordance with

federal,

state, and local regulations.



**WEST BENGAL CHEMICAL INDUSTRIES LIMITED**

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com) Website: [www.wbcil.com](http://www.wbcil.com)

Issue Date: Jan 2025  
Revision Date: Dec 2026  
03

Revision No.: