

## **Safety Data Sheet**

# Tartaric Acid (L-), Reagent Plus

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Tartaric Acid (L-), Reagent Plus

Synonyms/Generic Names: 2,3-Dihydroxybutanedioic acid; L-(+)-Tartaric Acid; Malic acid, 3-hydroxy-;

Succinic acid, 2,3-dihydroxy

**Product Number: 5742** 

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.

N4335 Temkin Rd. Columbus, WI. 53925

For More Information Call: 920-623-2140 (Monday-Friday 8:00-4:30)

www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

#### 2. HAZARDS IDENTIFICATION

Signal Words: Danger

**Pictograms** 



#### **GHS Classification:**

Serious eye damage/eye irritation	Category 1
Skin corrosion/ irritation	Category 2

#### GHS Label Elements, including precautionary statements:

#### **Hazard Statements:**

H315	Causes skin irritation	
H318	Causes serious eye damage.	

#### **Precautionary Statements:**

P264	Wash skin thoroughly after handling.	
P280	Wear protective gloves/eye protection/face protection.	
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.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove	
	contact lenses, if present and easy to do. Continue rinsing.	
P310	Immediately call a POISON CENTER or doctor/physician.	

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## **Potential Health Effects**

Eyes	Causes serious eye damage.	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.	
Skin	May be harmful if absorbed through skin. Causes skin irritation.	
Ingestion	May be harmful if swallowed.	

#### **NFPA Ratings**

Health	2
Flammability	0
Reactivity	0
Specific hazard	Not Available

#### **HMIS Ratings**

Health	2
Fire	0
Reactivity	0

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Tartaric Acid	>99	87-69-4	201-766-0	C <sub>4</sub> H <sub>6</sub> O <sub>6</sub>	150.09 g/mol

## 4. FIRST- AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.	
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not	
	breathing, give artificial respiration. Get medical attention.	
Skin	Flush with plenty of water for at least 15 minutes while removing contaminated clothing and	
	wash using soap. Get medical attention.	
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If	
	conscious, wash out mouth with water. Get medical attention.	

## **5. FIREFIGHTING MEASURES**

Suitable (and unsuitable)	Use nebulized water, foam, powder. Use water spray to keep fire-	
extinguishing media	exposed containers cool.	
Special protective equipment	Wear self-contained breathing apparatus and protective clothing to	
and precautions for firefighters	prevent contact with skin or eyes.	
Specific hazards arising from	Emits toxic fumes (carbon oxides) under fire conditions. (See also	
the chemical	Stability and Reactivity section).	

## **6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures	Remove the employees that are not involved from the spill area and call the emergency team. See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to a federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Stop or contain the spillage at source. Pick up and arrange disposal without creating dust. Sweep up and place in suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

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#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Avoid contact with skin and eyes. Avoid formation of dusts. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

#### **Personal Protection**

Eyes	Wear chemical safety glasses, goggles, face shield.	
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.	
Skin	Wear nitrile or rubber gloves, and lab coat/apron. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.	
Other	Not Available	

#### **Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White, fine granular powder.
Odor	Odorless.
Odor threshold	Not Available
pH	1.0-2.0 at 150 g/l at 25°C (77°F)
Melting point/freezing point	170°C (338°F)
Initial boiling point and boiling range	Not Available
Flash point	>200 °C (392 °F)
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Flammable
Vapor pressure	<5.23
Vapor density	Not Available
Relative density	$1.76 \text{ g/cm}^3 \cdot 10^{-2} \text{ mPa} = <5.23 \cdot 10^{-5} \text{ Pa} <3.93 \cdot 10^{-7} \text{ mmHg}$
	at 40°C (104°F)
Solubility (ies)	Very soluble in water
Partition coefficient: n-octanol/water	$\log K_{ow} < 0$
Auto-ignition temperature	>400°C (752°F)
Decomposition temperature	>170°C (338°F)

#### 10. STABILITY AND REACTIVITY

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Chemical Stability	Stable under recommended storage conditions.	
Possibility of Hazardous Reactions	will not occur under normal conditions.	
Conditions to Avoid	Excessive heat.	
Incompatible Materials	Strong oxidizing reagents; material reacts with metals (especially	
-	silver), strong bases, reducing agents.	
Hazardous Decomposition Carbon oxides.		
Products		

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity** 

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available
Intravenous	LD50 - mouse - 485 mg/kg

Carcinogenicity

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IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.	
	identified as probable, possible of confirmed number cardinogen by TAIXO.	
ACGIH	No components of this product present at levels greater than or equal to 0.1% is	
	identified as a carcinogen or potential carcinogen by ACGIH.	
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.	
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	

Signs & Symptoms of Exposure

Skin	kin Irritation or pain.	
Eyes	Redness, lacrimation, pain, foreign body sensation.	
Respiratory	Cough, dyspnea, respiratory difficulty, asthma.	
Ingestion	Nausea, vomiting.	

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Classified
Embryotoxicity	Not Available
Specific Target Organ	Respiratory tract
Toxicity	
Reproductive Toxicity	Not Classified
Respiratory/Skin Sensitization	Not Classified

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** 

<b>Aquatic Vertebrate</b>	Not Available	
Aquatic	EC50 – Daphnia magna (water flea) - 93.31 mg/l - 48h	
Invertebrate		
Terrestrial	Not Available	

Persistence and Degradability	Readily biodegradable in water	
Bioaccumulative Potential	Low potential for bioaccumulation (log $K_{ow}$ <4)	
Mobility in Soil	Not Available	
PBT and vPvB Assessment	Does not meet the criteria for PBT and vPvB.	

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Other Adverse Effects	Avoid release to the environment
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## 13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.	
Product	Users should review their operations in terms of the applicable federal/national or	
Containers	local regulations and consult with appropriate regulatory agencies if necessary	
	before disposing of waste product container.	

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

## 14. TRANSPORTATION INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

## 15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Not Listed
Massachusetts: Toxic or Hazardous Substance List	Not Listed
New Jersey: Right to Know Hazardous Substance	Not Listed
List	
Pennsylvania: Hazardous Substance List	Not Listed
Rhode Island: Hazardous Substance List	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard
SARA 312	Acute Health Hazard
SARA 313	Not Listed
WHMIS Canada	Not Listed

## **16. OTHER INFORMATION**

Revision	Date
Revision 1	07/29/2011
Revision 2	10/22/2013
Revision 3	08/11/2014
Revision 4	05/24/2016
Revision 5	03/23/2021

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