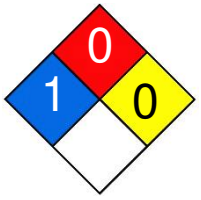

Revision 2

1. IDENTIFICATION

Product Name	**Ascorbic Acid**
Other Names	L(+)-Ascorbic acid; Vitamin C; ascorbic acid; l-ascorbic acid
Uses	
Chemical Family	No Data Available
Chemical Formula	$C_6H_8O_6$
Chemical Name	
Product Description	No Data Available
Company	**Arman sina.co**
Contact Information	info@armansina.com **www.armansina.com**

2. HAZARD IDENTIFICATION

Hazard Categories	The product is not classified as hazardous according to CLP Regulation (EC) No 1272/2008.
Signal Word	No Data Available
Hazard Statements	No Data Available
Precautionary Statements	No Data Available

sumbol

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Ascorbic Acid	$C_6H_8O_6$	50-81-7	100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	In case of consumption in large quantities, it is recommended to seek medical assistance.
Eye	Rinse with water until the product has been eliminated. In case of problems, consult a doctor showing the SDS for the product.
Skin	In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,…), seek medical advice with this Safety Data Sheet
Inhaled	In case of symptoms, move the person affected into fresh air.
Advice to Doctor	Consult a doctor in case of discomfort showing the SDS for the product.

5. FIRE FIGHTING MEASURES

General Measures	Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.
Flammability Conditions	Due to its non-inflammable nature, the product does not present a fire risk under normal conditions of storage, handling and use.
Extinguishing Media	Product is non-flammable, with a low risk of fire due to the flammability characteristics of the product in normal conditions of storage, handling and use. In the case of the existence of sustained combustion as a result of improper handling, storage or use any type of extinguishing agent can be used (ABC Powder, water,...)
Fire and Explosion Hazard	
Hazardous Products of Combustion	No Data Available
Special Fire Fighting Instructions	Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.
Personal Protective Equipment	No Data Available
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	For non-emergency personnel: Isolate leaks provided that there is no additional risk for the people performing this task. For emergency responders: Wear protective equipment. Keep unprotected persons away. See section 8.
Clean Up Procedures	Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal
Containment	No Data Available
Decontamination	No Data Available
Environmental Precautionary Measures	This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.
Evacuation Criteria	No Data Available

Personal Precautionary Measures **Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8).**
See sections 8 and 13.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Protect frommoisture. Protect from light and moisture. Do not get in eyes. Wash hands thoroughly after handling. Do not get in eyes, on skin, on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Do not taste or swallow. Use personal protective equipment as required. Wear protective gloves/protective clothing/eye protection/face protection. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. See Section 8 of the SDS for Personal Protective Equipment. Do not eat, drink or smoke when using the product. Wash at the end of each work shift and before eating, smoking and using the toilet.
Storage	Keep tightly closed in a dry and cool place. Protect from light and moisture
Container	Keep only in the original container or packaging

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Exposure Limits	None of the components have assigned exposure limits.
Biological Limits	No information available.
Engineering Measures	No special requirements under ordinary conditions of use and with adequate ventilation.

Personal Protection Equipment	Eye/face protection: Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield. Use personal protective equipment as required. Skin Protection Hand Protection: Chemical resistant gloves Other: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety Professional or manufacturer for specific information. Wear suitable protective clothing.
Special Hazards Precaustions	
Work Hygienic Practices	Do not get in eyes. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystals or powder
Odour	Odorless
Colour	White to slightly yellow
pH	3 (5 g/l, 20 °C) 2 (50 g/l, 20 °C)
Vapour Pressure	0.01 kPa (192.15 °C)
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	190 °C
Freezing Point	190 °C
Solubility	Solubility in water: 330 g/l (20 °C) Solubility (other): absolute ethanol: 0.02 g/ml propylene glycol: 0.05 g/ml USP
Specific Gravity	1.05 (Water = 1)
Flash Point	No information available.
Auto Ignition Temp	No information available.
Evaporation Rate	No information available.
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	1.65 g/ml (20 °C)
Specific Heat	No Data Available
Molecular Weight	176.12 g/mol
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Not applicable.

Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	No information available.
Reactions That Release Gases or Vapours	No information available.
Release of Invisible Flammable Vapours and Gases	No information available. No information available.

10. STABILITY AND REACTIVITY

General Information	No dangerous reaction known under conditions of normal use
Chemical Stability	Material is stable under normal conditions.
Conditions to Avoid	No special precautions.
Materials to Avoid	Strong oxidizing agents. Alkalies. Iron. Copper.
Hazardous Decomposition Products	Not determined
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information

Information on likely routes of exposure
Inhalation: No adverse effects are expected.
Skin Contact: No adverse effects are expected.
Eye contact: None known or expected under normal use.
Ingestion: No adverse effects due to ingestion are expected.

Information on toxicological effects Acute toxicity (list all possible routes of exposure) Oral Product: LD 50 (Rat): 11,900 mg/kg Dermal Product: No data available. Inhalation Product: No data available.

Acute

Ingestion	No Data Available
Other	No Data Available
Inhalation	No Data Available
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity	No Data Available
Persistence/Degradability	Readily biodegradable; Low persistence in water/soil; Low persistence in air.
Mobility	The product is water soluble and may spread in water systems.
Environmental Fate	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Bioaccumulation Potential	No Data Available
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Since emptied containers retain product residue, follow label warnings even after container is emptied.
Special Precautions for Land Fill	Discharge, treatment, or disposal may be subject to national, state, or local laws. Do not allow to enter drains, sewers or watercourses.

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name	Ascorbic acid
Class	No Data Available
Subsidiary Risk(s)	No Data Available
EPG	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Sea Transport

Proper Shipping Name	Ascorbic acid
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available

Marine Pollutant	No

Air Transport

Proper Shipping Name	Ascorbic acid
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

15. OTHER INFORMATION

Revision	3
Key/Legend	**< Less Than** **> Greater Than** **AICS Australian Inventory of Chemical Substances** **atm Atmosphere** **CAS Chemical Abstracts Service (Registry Number)** **cm² Square Centimetres** **CO2 Carbon Dioxide** **COD Chemical Oxygen Demand** **deg C (° C) Degrees Celcius** **deg F (° F) Degrees Farenheit** **g Grams** **g/cm³ Grams per Cubic Centimetre** **g/l Grams per Litre** **HSNO Hazardous Substance and New Organism** **IDLH Immediately Dangerous to Life and Health** **immiscible Liquids are insoluable in each other.** **inHg Inch of Mercury** **inH2O Inch of Water** **K Kelvin** **kg Kilogram** **kg/m³ Kilograms per Cubic Metre** **lb Pound** **LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50%** (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. **LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one** half) of a group of test animals. **ltr or L Litre** **m³ Cubic Metre** **mbar Millibar** **mg Milligram** **mg/24H Milligrams per 24 Hours** **mg/kg Milligrams per Kilogram** **mg/m³ Milligrams per Cubic Metre**

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight