ZONE

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Zone Imaging Ltd. Safety Data Sheet L-Ascorbic Acid

According to Regulation (EC) No 1907/2006, Annex II, as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name L-Ascorbic acid

Additional Identification Vitamin C

Product number

Container size 50g

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Intermediate chemical used in the synthesis of photo-chemicals.

Other uses None

1.3. Details of the supplier of the safety data sheet

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Product definition: Substance

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

Not classified for physical or health hazards.

2.2. <u>Label elements</u>

Pictograms None

Signal word None

Hazard statements None

Precautionary statements See "Prevention" directly below

Prevention P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands and equipment thoroughly after handling.

P270: Do not eat/drink/smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face

protection.

2.3. Other Hazards

Other hazards which do not

result in classification None

SECTION 3: Composition/information on ingredients

3.1. <u>Mixture of the substances listed below with harmless additions</u>

Substance name	Identifiers	Concentration	Hazards
L-Ascorbic Acid	CAS# 50-81-7 EC# 200-066-2	100%	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Show this material safety data sheet to the doctor in attendance.

Inhalation Move to fresh air in case of accidental inhalation of vapours. If

unconscious, check for breathing and apply artificial respiration if

necessary.

Ingestion Wash out mouth with water.

Skin contact Wash immediately with plenty of soap and water.

Eye contact Flush eyes with water as a precaution.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. <u>Indication of any immediate medical attention and special treatment needed</u>

Notes for the doctor Provide SDS document. Doctor should treat symptomatically.

SECTION 5: Firefighting measures

5.1. <u>Extinguishing media</u>

Suitable extinguishing media Carbon dioxide, dry chemical powder, water spray.

Unsuitable extinguishing media Not available

5.2. Special hazards arising from the substance or mixture

Specific risks None.

Hazardous combustion products Thermal decomposition or combustion products may include

carbon oxides.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours.

Special protective equipment Wear protective eyewear, gloves and clothing. Use NIOSH

approved respiratory protection/breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

For personal protection, see Section 8.

Environmental precautions

Environmental precautions Not applicable.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Sweep up and shovel. Keep in suitable, closed containers for

disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Ensure there is exhaust ventilation of the area. For

precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in a tightly closed, original container away from light

and somewhere dry and cool.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section

1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters: Occupational exposure limits

There are no occupational exposure limits values.

8.2. Exposure controls

Protective equipment







Appropriate engineering controls

Provide adequate ventilation. This product must not be handled in a confined space without adequate ventilation.

Eye/face protection

Tightly sealed safety glasses or face shield.

Hand protection

Use protective gloves. The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374. Only use chemical-protective gloves with CE-labelling of category III.

Avoid contact with used gloves.

Recommended material of gloves: Nitrile rubber.

Recommended minimum thickness of the material: \geq = 0.11

mm

Other skin and body protection

Wear suitable protective clothing as protection against

splashing or contamination.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection

must be worn.

SECTION 9: Physical and Chemical Properties

9.1. <u>Information on basic physical and chemical properties</u>

Appearance Fine crystals

Colour White

Odour No data available.

pH 1.0 - 2.5 at 176g/l

Melting point 190-194°C

Initial boiling point and range No data available.

Flash point (closed cup) No data available.

Flammability (solid, gas) No data available.

Upper/lower flammability or

explosive limits No data available

Vapor pressure No data available

Vapor density No data available

Density 1.65 g/cm3 at 20 °C

Relative density No data available.

Water solubility 300g/l

Partition coefficient: n-octanol/water No data available.

Autoignition temperature No data available

Decomposition temperature No data available

Explosive properties No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No data available.

10.2. Chemical stability

Stability Stable under the prescribed storage conditions. No stability

concerns.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous

reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Strong heating. Light.

10.5. <u>Incompatible materials</u>

Materials to avoid Strong oxidising agents.

10.6. <u>Hazardous decomposition products</u>

Hazardous decomposition products Thermal decomposition or combustion products may include

carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Germ cell mutagenicity The substance is not classified as mutagenic.

Carcinogenicity The product contains no carcinogenic substances.

Reproductive toxicity No data available.

Specific target organ toxicity STOT - single exposure: No data available.

STOT – repeated exposure: No data available.

Acute and chronic health hazards None.

Acute toxicity				
LD/LC50 values that are relevant for classification:				
L-Ascorbic Acid				
Oral	LD50	11900 mg/kg (rat)		

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity The product does not contain a substance which is harmful to

aquatic organisms.

Acute toxicity – fish LC50, 96 hours: 1,020 mg/l, Oncorhynchus mykiss (rainbow

trout)

Acute toxicity – aquatic invertebrates EC50, 48 hours: 360 mg/l, Daphnia magna (Water flea)

Acute toxicity – algae IC50, 72 hours: 1,750 mg/l, Desmodesmus subspicatus

(green algae)

Acute toxicity – bacteria EC50, 16 hours: 140mg/l, Pseudomonas putida

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable

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12.3. <u>Bioaccumulation</u>

Bioaccumulation No data available. Unlikely as product is soluble in water.

12.4. Mobility in soil

Mobility in soil Product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as

PBT or vPvB.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methodsWaste material must be disposed of in accordance with the

national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned

containers like the product itself.

SECTION 14: Transport information

Not regulated for all modes of transportation.

UN Number (ADR/RID, IMDG,	N/A
IATA)	
UN Proper Shipping Name	Not applicable
(ADR/RID, IMDG, IATA)	
Transport Hazard Class(es)	
ADR/RID, IMDG, IATA	None
Packing group (ADR/RID, IMDG,	Not applicable
IATA)	
Environmental hazards	None
Special precautions for user	None
Transport in bulk according to	Not applicable
Annex	
II of MARPOL73/78 and the IBC	
Code	
Transport/Additional Information	Not dangerous according to the above
	specifications.

SECTION 15: Regulatory information

15.1. <u>Safety, health and environmental regulations/legislation specific for the substance or mixture</u>

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

Guidance

Workplace Exposure Limits EH40.

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

General information

Zone Imaging Ltd believe the information and recommendations contained herein are based on correct and factual data. However, no express or implied guarantee or warranty of any kind is made with respect to this information. Use this information only to supplement other information you have gathered and then make an independent determination about the completeness and suitability of all information to ensure the proper use and disposal of this product and the health and safety of employees and customers.

Issued by

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Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road (Accord Européen sur le Transport des Marchandises Dangereuses par Route)

RID: European Agreement concerning the International

Carriage of Dangerous Goods by Rail

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EC: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration at which 50% of the animals will be expected to die.

LD50: Lethal dose at which 50% of the animals will be expected to die.

EC50: Effective concentration of test substance which results in a 50 percent reduction in either algae growth (EbC50) or algae growth rate (ErC50) or Daphina immobilization.

Hazard statements in full

None