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Information Sheet		
SECTION 1. Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier Code: 013396 Product name CYSTEINE-L HCI MONOHYDRATE FOOD GRADE EC number 200-157-7 CAS number 7048-04-6		
1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use raw material for dietetic product.		
1.3. Details of the supplier of the Information Sheet Name Full address District and Country e-mail address of the competent person responsible for the information sheet ACEF S.p.A. Via Umbria 8/14 29017 FIORENZUOLA D'ARDA (PC) Italia Tel. +39 0523 241911 Fax +39 0523 241929 - 241968 sicurezza@pec.acef.it		
1.4. Emergency telephone number For urgent inquiries refer to Centro Antiveleni, Policlinico "Umberto I", Tossicologia d'urgenza, Roma - Tel. +39 06-49978000 Centro Antiveleni, Az. Osp. Niguarda Cà Grande, Milano - Tel. +39 02-66101029 Centro Antiveleni, Az. Osp. "Antonio Cardarelli", Napoli - Tel. +39 081-5453333 Centro Antiveleni, Az. Osp. "Papa Giovanni XXIII", Bergamo - Tel. 800883300 Centro Antiveleni, IRCCS Fondazione Salvatore Maugeri, Pavia - Tel. +39 0382-24444 Centro Antiveleni, Az. Osp. Careggi, U.O. Tossicologia medica, Firenze - Tel. +39 055-7947819 Centro antiveleni del Policlinico "Agostino Gemelli", Roma - Tel. +39 06-3054343 Centro Antiveleni, Az. Osp. Foggia - Tel. 800183459 Centro Antiveleni, Ospedale pediatrico Bambino Gesù, Roma; Tel. +39 06-68593726 Centro Antiveleni dell'Az. Osp. universitaria integrata (AOUI) di Verona, Verona - Tel. 800011858		
SECTION 2. Hazards identification		
2.1. Classification of the substance or mixture The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). Hazard classification and indication: --		
2.2. Label elements Hazard pictograms: Signal words: Hazard statements: Precautionary statements: -- -- -- --		

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SECTION 2. Hazards identification ... / >>		
This product is not subject to hazard labeling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements. 2.3. Other hazards The substance does not have persistence, bioaccumulation and toxicity (PBT) properties and is not very persistent and very bioaccumulative. (vPvB). The substance does not have endocrine disrupting properties.		
SECTION 3. Composition/information on ingredients		
3.1. Substances The product does not contain substances classified as being hazardous to human health or the environment pursuant to the provisions Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and supplements) in such quantities as to require the statement.		
SECTION 4. First aid measures		
4.1. Description of first aid measures No effects requiring implementation of special first aid measures are expected. The following information represents practical indications of correct behaviour in the event of contact with a chemical product, even if not hazardous. In case of doubt or in the presence of symptoms contact a doctor and show him this document. In case of more severe symptoms, ask for immediate medical aid. <u>Rescuer protection</u> It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8. 4.2. Most important symptoms and effects, both acute and delayed No episodes of damage to health ascribable to the product have been reported. 4.3. Indication of any immediate medical attention and special treatment needed If symptoms occur, whether acute or delayed, consult a doctor. <u>Means to have available in the workplace for specific and immediate treatment</u> Running water for skin and eye wash.		
SECTION 5. Firefighting measures		
5.1. Extinguishing media SUITABLE EXTINGUISHING EQUIPMENT The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray. UNSUITABLE EXTINGUISHING EQUIPMENT None in particular. 5.2. Special hazards arising from the substance or mixture HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition. 5.3. Advice for firefighters GENERAL INFORMATION Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations. SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with		



self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use breathing equipment if fumes or powders are released into the air. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Confine using earth or inert material. Collect as much material as possible and eliminate the rest using jets of water. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material information sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for particulate not otherwise classified (PNOC respirable fraction: 3 mg/m³; PNOC inhalable fraction: 10 mg/m³). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment. The above values are not TLVs, but guide values, to be used for particles that do not have their own TLV and that are insoluble or poorly soluble in water and have low toxicity.

8.2. Exposure controls

Comply with the safety measures usually applied when handling chemical substances.

HAND PROTECTION

None required.

SKIN PROTECTION

None required.

EYE PROTECTION

None required.

RESPIRATORY PROTECTION

Use a type P filtering facemask, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment (see standard EN 149).

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

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SECTION 9. Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Properties Appearance Colour Odour Melting point / freezing point Initial boiling point Flammability Lower explosive limit Upper explosive limit Flash point Auto-ignition temperature Decomposition temperature pH Kinematic viscosity Solubility Partition coefficient: n-octanol/water Vapour pressure Density and/or relative density Relative vapour density Particle characteristics	Value crystalline powder white characteristic 175 °C not applicable not available not available not available not applicable not available not available 1,2 not available water solubility (20 °c) 1000 g/l logP of -2.49 not available not available not available not available	Information
9.2. Other information		
9.2.1. Information with regard to physical hazard classes		
Information not available		
9.2.2. Other safety characteristics		
Molecular weight g/mol Explosive properties Oxidising properties	175,64 not explosive not oxidizing	
SECTION 10. Stability and reactivity		
10.1. Reactivity		
There are no particular risks of reaction with other substances in normal conditions of use.		
10.2. Chemical stability		
The product is stable in normal conditions of use and storage.		
10.3. Possibility of hazardous reactions		
The powders are potentially explosive when mixed with air.		
10.4. Conditions to avoid		
Avoid environmental dust build-up.		
10.5. Incompatible materials		
Information not available		
10.6. Hazardous decomposition products		
Information not available		

**SECTION 11. Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

Does not meet the classification criteria for this hazard class

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the substance is not listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

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SECTION 12. Ecological information		
Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.		
12.1. Toxicity		
Information not available		
12.2. Persistence and degradability		
Information not available		
12.3. Bioaccumulative potential		
Information not available		
12.4. Mobility in soil		
Information not available		
12.5. Results of PBT and vPvB assessment		
The substance does not have persistence, bioaccumulation and toxicity (PBT) properties and is not very persistent and very bioaccumulative. (vPvB).		
12.6. Endocrine disrupting properties		
Based on the available data, the substance is not listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.		
12.7. Other adverse effects		
Information not available		
SECTION 13. Disposal considerations		
13.1. Waste treatment methods		
Reuse, when possible. Neat product residues should be considered special non-hazardous waste. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Solid residues may be suitable for disposal in an authorised landfill site. CONTAMINATED PACKAGING Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.		
SECTION 14. Transport information		
The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.		
14.1. UN number or ID number		
not applicable		
14.2. UN proper shipping name		
not applicable		
14.3. Transport hazard class(es)		
not applicable		

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SECTION 14. Transport information ... / >>		
14.4. Packing group not applicable 14.5. Environmental hazards not applicable 14.6. Special precautions for user not applicable 14.7. Maritime transport in bulk according to IMO instruments Information not relevant		
SECTION 15. Regulatory information		
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Seveso Category - Directive 2012/18/EU: None Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006 None Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors not applicable Substances in Candidate List (Art. 59 REACH) On the basis of available data, the product does not contain any SVHC in percentage $\geq$ than 0,1%. Substances subject to authorisation (Annex XIV REACH) None Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012: None Substances subject to the Rotterdam Convention: None Substances subject to the Stockholm Convention: None Healthcare controls Information not available 15.2. Chemical safety assessment Has not been performed / is not yet available a chemical safety assessment for the substance.		
SECTION 16. Other information		
LEGEND: - ADR: European Agreement concerning the carriage of Dangerous goods by Road - ATE: Acute Toxicity Estimate - CAS: Chemical Abstract Service Number - CE50: Effective concentration (required to induce a 50% effect) - CE: Identifier in ESIS (European archive of existing substances) - CLP: Regulation (EC) 1272/2008 - DNEL: Derived No Effect Level - EmS: Emergency Schedule - GHS: Globally Harmonized System of classification and labeling of chemicals - IATA DGR: International Air Transport Association Dangerous Goods Regulation - IC50: Immobilization Concentration 50% - IMDG: International Maritime Code for dangerous goods - IMO: International Maritime Organization - INDEX: Identifier in Annex VI of CLP		

**SECTION 16. Other information ... / >>**

- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2019/521 (XII Atp. CLP)
 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
 17. Regulation (EU) 2019/1148
 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
 22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
 23. Delegated Regulation (UE) 2023/707
 24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
 24. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in



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Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.