

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking**1.1 Product Identifier**

Product Name Carba-R Sample Reagent
Product Code 700-6822

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Use(s) Laboratory use

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer Cepheid AB
Röntgenvägen 5
SE-171 54 Solna
Sweden
www.cepheidinternational.com
EU: support@cepheideurope.com

Telephone (General) 1 (888) 838-3222 - US Option 2

Telephone (General) 33 563 825 319 - EU

1.4 Emergency Telephone Number

Manufacturer 1 (800) 535-5053 - INFOTRAC - 24 hr Emergency

Manufacturer 1 (352) 323-3500 - Outside of the US

Section 2: Hazards Identification**UN GHS Revision 3**

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Third Revised Edition

2.1 Classification of the Substance or Mixture

UN GHS Skin Irritation 2
Eye Irritation 2A

2.2 Label Elements

UN GHS

WARNING

Hazard Statements Causes skin irritation
Causes serious eye irritation

Precautionary Statements
Prevention Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Response IF ON SKIN: Wash with plenty of soap and water.
Specific treatment, see supplemental first aid information.
If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Call a POISON CENTER or doctor/physician if you feel unwell.

2.3 Other Hazards

UN GHS

According to the Globally Harmonized System for Classification and Labeling (GHS) this product is considered hazardous.

Section 3: Composition/Information on Ingredients

3.1 Substances

Material does not meet the criteria of a substance.

3.2 Mixtures

Composition

Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
L-Cysteine, N-acetyl-	CAS: 616-91-1	< 2%	5050 mg/kg	EU CLP: Annex VI, Table 3.1 Eye Irrit. 2, H319; Skin Irrit. 2, H315 UN GHS Revision 3e: Skin Irrit. 2; Eye Irrit. 2A OSHA HCS 2012: Skin Irrit. 2; Eye Irrit. 2A	NDA

See Section 16 for full text of H-statements.

Section 4: First Aid Measures

4.1 Description of First Aid Measures

Inhalation

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Move victim to fresh air. Administer oxygen if breathing is difficult. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Give artificial respiration if victim is not breathing.

Skin

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing.

Eye

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. Obtain medical attention immediately if ingested.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Refer to Section 11 - Toxicological Information.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to Physician

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Firefighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media LARGE FIRES: Dry chemical, CO₂, alcohol-resistant foam or water spray.
SMALL FIRES: Dry chemical, CO₂ or water spray.

Unsuitable Extinguishing Media No data available

5.2 Special Hazards Arising from the Substance or Mixture

Unusual Fire and Explosion Hazards May emit toxic fumes of carbon oxides, nitrogen oxides, hydrogen chloride gas.

Hazardous Combustion Products No data available

5.3 Advice for Firefighters

Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Wear positive pressure self-contained breathing apparatus (SCBA).

SMALL FIRES: Move containers from fire area if you can do it without risk.

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions In the event a cartridge is broken these personal precautions are applicable. Wear appropriate protective clothing. Do not walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas.

Emergency Procedures No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended.

6.2 Environmental Precautions

Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and Material for Containment and Cleaning Up

**Containment/
Clean-up Measures** For small spills, wear gloves and absorb spill with paper towel. Do not dispose spilled materials down drain.

6.4 Reference to Other Sections

Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7: Handling and Storage**7.1 Precautions for Safe Handling**

Handling No special handling necessary. If cartridge is broken avoid contact with spilled reagents. Avoid contact with skin and eyes.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Storage Store according to product labeling. Keep container/package tightly closed in a cool, well-ventilated place. Keep away from incompatible materials.

7.3 Specific End Use(s)

Refer to Section 1.2 - Relevant identified uses.

Section 8: Exposure Controls/Personal Protection**8.1 Control Parameters**

Exposure Limits/Guidelines No applicable exposure limits available for product or components.

8.2 Exposure Controls

Engineering Measures/Controls Good general ventilation 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.

Personal Protective Equipment

Respiratory Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face Wear chemical splash safety goggles.

Skin/Body Wear protective clothing.

Environmental Exposure Controls Follow best practice for site management and disposal of waste.

Section 9: Physical and Chemical Properties**9.1 Information on Physical and Chemical Properties**

Material Description			
Physical Form	Liquid	Appearance/Description	Data lacking
Color	Clear	Odor	Odorless
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	6.6 to 8.5
Specific Gravity/Relative Density	= 1 Water=1	Density	Data lacking
Water Solubility	Soluble 100 %	Viscosity	Data lacking
Explosive Properties	Data lacking	Oxidizing Properties:	Data lacking
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition Coefficient	Data lacking		

9.2 Other Information

No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity**10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

10.2 Chemical Stability

Stable

10.3 Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

10.4 Conditions to Avoid

Excess heat.

10.5 Incompatible Materials

Strong oxidizing agents.

10.6 Hazardous Decomposition Products

Carbon and sodium oxides, hydrogen chloride gas.

Section 11: Toxicological Information

11.1 Information on Toxicological Effects

Components		
L-Cysteine, N-acetyl- (< 2%)	616-91-1	Acute Toxicity: Ingestion/Oral-Rat LD50 • 5050 mg/kg Irritation: No information available

GHS Properties	Classification
Acute Toxicity	EU/CLP•Data lacking UN GHS 3•Data lacking OSHA HCS 2012•Data lacking
Skin Corrosion/Irritation	EU/CLP•Skin Irritation 2 UN GHS 3•Skin Irritation 2 OSHA HCS 2012•Skin Irritation 2
Serious Eye Damage/Irritation	EU/CLP•Eye Irritation 2 UN GHS 3•Eye Irritation 2A OSHA HCS 2012•Eye Irritation 2A
Skin Sensitization	EU/CLP•Data lacking UN GHS 3•Data lacking OSHA HCS 2012•Data lacking
Respiratory Sensitization	EU/CLP•Data lacking UN GHS 3•Data lacking OSHA HCS 2012•Data lacking
Aspiration Hazard	EU/CLP•Data lacking UN GHS 3•Data lacking OSHA HCS 2012•Data lacking
Carcinogenicity	EU/CLP•Data lacking UN GHS 3•Data lacking OSHA HCS 2012•Data lacking
Germ Cell Mutagenicity	EU/CLP•Data lacking UN GHS 3•Data lacking OSHA HCS 2012•Data lacking
Toxicity for Reproduction	EU/CLP•Data lacking UN GHS 3•Data lacking OSHA HCS 2012•Data lacking
STOT-SE	EU/CLP•Data lacking UN GHS 3•Data lacking OSHA HCS 2012•Data lacking
STOT-RE	EU/CLP•Data lacking UN GHS 3•Data lacking OSHA HCS 2012•Data lacking



Safety Data Sheet

Effective Date: April, 2020

Carba-R Sample Reagent

Potential Health Effects

Inhalation

Acute (Immediate) May cause irritation.

Chronic (Delayed) No data available

Skin

Acute (Immediate) Causes skin irritation.

Chronic (Delayed) No data available

Eye

Acute (Immediate) Causes serious eye irritation.

Chronic (Delayed) No data available

Key to abbreviations

LD = Lethal Dose

Section 12: Ecological Information

12.1 Toxicity

Material data lacking.

12.2 Persistence and Degradability

Material data lacking.

12.3 Bioaccumulative Potential

Material data lacking.

12.4 Mobility in Soil

Material data lacking.

12.5 Results of PBT and vPvB Assessment

No PBT and vPvB assessment has been conducted.

12.6 Other Adverse Effects

No studies have been found.

Section 13: Disposal Considerations

13.1 Waste Treatment Methods

Product Waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging Waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

13.2 Other Information

Biological specimens, transfer devices, and used cartridges should be considered capable of transmitting infectious agents requiring standard precautions. Follow your institution's environmental waste procedures for proper disposal of used cartridges and unused reagents. These materials may exhibit characteristics of chemical hazardous waste requiring specific national or regional disposal procedures. If national or regional regulations do not provide clear direction on proper disposal, biological specimens and used cartridges should be disposed per WHO (World Health Organization) medical waste handling and disposal guidelines.

Section 14: Transport Information

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class(es)	14.4 Packing Group	14.5 Environmental Hazards
DOT	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
TDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IMO/IMDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IATA/ICAO	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA

14.6 Special Precautions for User

None known.

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Section 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

SARA Hazard Classifications

Serious eye irritation / Skin irritation

Component	Inventory					
	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
L-Cysteine, N-acetyl-	616-91-1	Yes	No	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

Canada - WHMIS - Ingredient Disclosure List

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

Environment

Canada - CEPA - Priority Substances List

•L-Cysteine, N-acetyl- 616-91-1 Not Listed



Safety Data Sheet

Effective Date: April, 2020

Carba-R Sample Reagent

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

United States- California

Environment

U.S. - California - Proposition 65 - Carcinogens List

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

•L-Cysteine, N-acetyl- 616-91-1 Not Listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16: Other Information**Relevant Phrases (code & full text)**

H315 – Causes skin irritation

H319 – Causes serious eye irritation

Disclaimer/**Statement of Liability**

The above information is based on data available to us and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it must make their own determination of the effects, properties, protections, and disposal which pertain to their particular conditions. No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the materials, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material. The above information is offered in good faith and with the belief that it is accurate. As of the date of issuance, we are providing all information relevant to the foreseeable handling of the material. However, in the event of an adverse incident associated with this product, this Safety Data Sheet is not, and is not intended to be, a substitute for consultation with appropriately trained personnel.

Key to abbreviations

NDA = No data available