Printing date 07/18/2021

Reviewed on 07/18/2021

1 Identification

- · Product name
- · Trade name: Ethylenediaminetetraacetic acid, 99+%
- *Item number:* 07-0573
- · CAS Number:
- 60-00-4 • **EC number:**
- 200-449-4
- Index number: 607-429-00-8
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Strem Chemicals, Inc. 7 Mulliken Way NEWBURYPORT, MA 01950 USA info@strem.com
- · Information department: Technical Department
- *Emergency telephone number: EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: +1 (978) 499-1600*

2 Hazard(s) identification

· Classification of the substance or mixture

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements
- *The substance is classified and labeled according to the Globally Harmonized System (GHS).* • *Hazard pictograms*

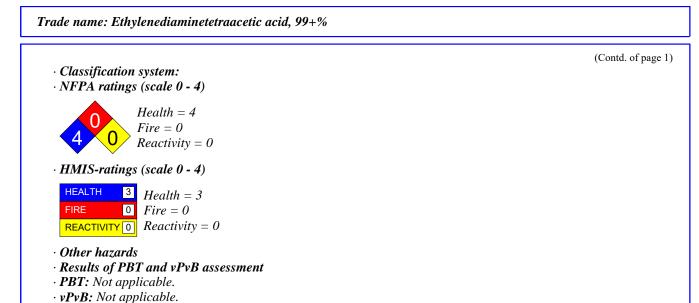


· Signal word Warning · Hazard statements H319 Causes serious eye irritation. · Precautionary statements P262 Do not get in eyes, on skin, or on clothing. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Store in a well-ventilated place. Keep container tightly closed. P403+P233 P501 Dispose of contents/container in accordance with local/regional/national/international regulations. (Contd. on page 2)

e 2)

Printing date 07/18/2021

Reviewed on 07/18/2021



3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 60-00-4 edetic acid
- · Identification number(s)
- EC number: 200-449-4
- Index number: 607-429-00-8

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

(Contd. on page 3)

US

Printing date 07/18/2021

Reviewed on 07/18/2021

(Contd. of page 2)

4.1 mg/m3

45 mg/m3

200 mg/m3

- Environmental precautions: No special measures required.
- \cdot Methods and material for containment and cleaning up:
- Dispose contaminated material as waste according to item 13. • Reference to other sections
- See Section 7 for information on safe handling.
- *See Section 8 for information on personal protection equipment. See Section 13 for disposal information.*

• Protective Action Criteria for Chemicals

· PAC-1:

· PAC-2:

· PAC-3:

7 Handling and storage

- · Handling:
- Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes.
- Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 4)

US

Printing date 07/18/2021

Reviewed on 07/18/2021

Trade name: Ethylenediaminetetraacetic acid, 99+%

(Contd. of page 3)

- Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation \cdot **Material of gloves**
- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

General Information Appearance:		
Form:	Crystalline	
Color:	White	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	245 °C (473 °F)	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not determined.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density at 20 °C (68 °F):	0.68 g/cm ³ (5.6746 lbs/gal)	
Bulk density at 20 °C (68 °F):	600 kg/m ³	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with Water at 20 °C (68 °F):	0.5 g/l	



Printing date 07/18/2021

CHEMICALS,

Reviewed on 07/18/2021

Trade name: Ethylenediaminetetraacetic acid, 99+%

		(Contd. of page
· Partition coefficient (n-octand	ol/water): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	0.0 %	
VOC content:	0.0 g/l / 0.00 lb/gl	
Solids content:	100.0 %	
• Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- $\cdot \textit{Incompatible materials: No further relevant information available.}$
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

60-00-4 edetic acid

Oral LD50 4500 mg/kg (rat)

- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.

(Contd. on page 6)

US

Printing date 07/18/2021

Reviewed on 07/18/2021

Trade name: Ethylenediaminetetraacetic acid, 99+%

· Behavior in environmental systems:

- · Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Not known to be hazardous to water.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

• Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

Transport information		
· UN-Number · DOT, ADN, IMDG, IATA	not regulated	
UN proper shipping name DOT, ADN, IMDG, IATA	not regulated	
Transport hazard class(es)		
DOT, ADN, IMDG, IATA Class	not regulated	
Packing group DOT, IMDG, IATA	not regulated	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	
UN "Model Regulation":	not regulated	

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture

- · Sara
- Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

(Contd. on page 7)



(Contd. of page 5)

US

Printing date 07/18/2021

CHEMICALS, INC.

Reviewed on 07/18/2021

Trade name: Ethylenediaminetetraacetic acid, 99+%

(Contd. of page 6)

Substance is list	
Substance is list	ed.
Proposition 65	
Chemicals know	vn to cause cancer:
Substance is not	listed.
Chemicals know	vn to cause reproductive toxicity for females:
Substance is not	listed.
Chemicals know	vn to cause reproductive toxicity for males:
Substance is not	listed.
Chemicals know	vn to cause developmental toxicity:
Substance is not	listed.
Carcinogenic co	itegories
EPA (Environn	nental Protection Agency)
Substance is not	listed.
TLV (Threshold	l Limit Value established by ACGIH)
Substance is not	listed
Sho stance is not	
	tional Institute for Occupational Safety and Health)
	tional Institute for Occupational Safety and Health)
NIOSH-Ca (Na Substance is not GHS label elem	tional Institute for Occupational Safety and Health) listed. ents
NIOSH-Ca (Na Substance is not GHS label elem	tional Institute for Occupational Safety and Health) i listed. ents s classified and labeled according to the Globally Harmonized System (GHS).
NIOSH-Ca (Na Substance is not GHS label elem The substance is	tional Institute for Occupational Safety and Health) i listed. ents s classified and labeled according to the Globally Harmonized System (GHS).
NIOSH-Ca (Na Substance is not GHS label elem The substance is	tional Institute for Occupational Safety and Health) i listed. ents s classified and labeled according to the Globally Harmonized System (GHS).
NIOSH-Ca (Na Substance is not GHS label elem The substance is	tional Institute for Occupational Safety and Health) i listed. ents s classified and labeled according to the Globally Harmonized System (GHS).
NIOSH-Ca (Na Substance is not GHS label elem The substance is	tional Institute for Occupational Safety and Health) i listed. ents s classified and labeled according to the Globally Harmonized System (GHS).
NIOSH-Ca (Na Substance is not GHS label elem The substance is Hazard pictogra GHS07	tional Institute for Occupational Safety and Health) Elisted. ents & classified and labeled according to the Globally Harmonized System (GHS). Ims
NIOSH-Ca (Na Substance is not GHS label elem The substance is Hazard pictogra GHS07 Signal word Wa	tional Institute for Occupational Safety and Health) T listed. ents s classified and labeled according to the Globally Harmonized System (GHS). tms
NIOSH-Ca (Na Substance is not GHS label elem The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme	tional Institute for Occupational Safety and Health) T listed. ents s classified and labeled according to the Globally Harmonized System (GHS). tms erning nts
NIOSH-Ca (Na Substance is not GHS label elem The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se	tional Institute for Occupational Safety and Health) ⁽¹⁾ listed. ents (classified and labeled according to the Globally Harmonized System (GHS). (GHS). (GHS) (G
NIOSH-Ca (Na Substance is not GHS label elem The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se	tional Institute for Occupational Safety and Health) T listed. ents is classified and labeled according to the Globally Harmonized System (GHS). ums trning nts rious eye irritation.
NIOSH-Ca (Na Substance is not GHS label elem The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P262	tional Institute for Occupational Safety and Health) T listed. ents s classified and labeled according to the Globally Harmonized System (GHS). uns training nts rious eye irritation. tatements Do not get in eyes, on skin, or on clothing.
NIOSH-Ca (Na Substance is not GHS label elem The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P262 P280	tional Institute for Occupational Safety and Health) Tisted. ents s classified and labeled according to the Globally Harmonized System (GHS). uns trans rious eye irritation. tatements Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. 338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if pre
NIOSH-Ca (Na Substance is not GHS label elem The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P262 P280 P305+P351+P.	tional Institute for Occupational Safety and Health) ¹ listed. ents s classified and labeled according to the Globally Harmonized System (GHS). uns erning nts rious eye irritation. tatements Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. 338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if pre and easy to do. Continue rinsing.
NIOSH-Ca (Na Substance is not GHS label elem The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P262 P280 P305+P351+PS P304+P340	tional Institute for Occupational Safety and Health) I listed. ents sclassified and labeled according to the Globally Harmonized System (GHS). tms rring nts rious eye irritation. tatements Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. 338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if pre and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing.
NIOSH-Ca (Na Substance is not GHS label elem The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P262 P280 P305+P351+P.	tional Institute for Occupational Safety and Health) ¹ listed. ents s classified and labeled according to the Globally Harmonized System (GHS). uns erning nts rious eye irritation. tatements Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. 338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if pre and easy to do. Continue rinsing.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Technical Department.

- · Contact: Technical Director
- · Date of preparation / last revision 07/18/2021 / -

Printing date 07/18/2021

CHEMICALS, INC.

Reviewed on 07/18/2021

Trade name: Ethylenediaminetetraacetic acid, 99+%

(Contd. of page 7)
· Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International
Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
- US