Printing date 11/17/2017

Reviewed on 11/17/2017

1 Identification

- · Product identifier
- · Trade name: Glycine (Aminoacetic Acid)
- Article number: G7520
- · CAS Number:
- 56-40-6
- · EC number: 200-272-2
- · Details of the supplier of the safety data sheet · Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586
- · Information department: Technical Coordinator Sherman Nelson sherman@aquasolutions.org · Emergency telephone number:
- Chemtrec: 800-424-9300 Canutec: 613-996-6666

2 Hazard(s) identification

- · Classification of the substance or mixture The substance is not classified according to the Globally Harmonized System (GHS).
- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · Precautionary statements
- If swallowed: Call a poison center/doctor if you feel unwell.
- If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.

(Contd. on page 2)

US

Printing date 11/17/2017

Reviewed on 11/17/2017

Trade name: Glycine (Aminoacetic Acid)

· vPvB: Not applicable.

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 56-40-6 Glycine (Aminoacetic Acid)
- · Identification number(s)
- EC number: 200-272-2

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- 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. Then 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.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 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: Substance is not listed.
- · PAC-2: Substance is not listed.
- · PAC-3: Substance is not listed.

7 Handling and storage

· Handling:

· Precautions for safe handling No special measures required.

(Contd. on page 3) US

Printing date 11/17/2017

Reviewed on 11/17/2017

(Contd. of page 2)

Trade name: Glycine (Aminoacetic Acid)

· 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: None.
- 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:
- The usual precautionary measures for handling chemicals should be followed.
- · 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. 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 • 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: Not required.
- · Body protection: Protective work clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- General Information
- · Appearance:

Form:	Crystalline	
Color:	White	
· Odor:	Characteristic	
· Odor threshold:	Not determined.	
· pH-value:	5.97	

(Contd. on page 4)

US

Printing date 11/17/2017

Reviewed on 11/17/2017

Trade name: Glycine (Aminoacetic Acid)

		(Contd. of page 2
· Change in condition		
Melting point/Melting range:	240 °C (464 °F)	
Boiling point/Boiling range:	Undetermined.	
· Flash point:	Not applicable.	
Flammability (solid, gaseous):	Product is not flammable.	
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):	1.595 g/cm ³ (13.31028 lbs/gal)	
Bulk density:	1,000 kg/m ³	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Not determined.	
Partition coefficient (n-octanol/wat	er): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
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.
- · 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:
- *Oral LD50 7,930 mg/kg (rat)*
- · Primary irritant effect:
- on the skin: No irritant effect.

(Contd. on page 5)

US

Printing date 11/17/2017

Reviewed on 11/17/2017

Trade name: Glycine (Aminoacetic Acid)

(Contd. of page 4)

- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The substance is not subject to classification.
- · 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.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:

· General notes:

Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 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: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number		
· DOT, ADN, IMDG, IATA	Not regulated	
\cdot UN proper shipping name		
\cdot DOT, $\hat{A}DN$, $\hat{I}\hat{A}TA$	Not regulated	
·IMDG	Not Regulated	
· Transport hazard class(es)		
· DOT, ADN, IMDG, IATA		
· Class	Not regulated	
· Packing group		
· DOT, IMDG, IATA	Not regulated	

Printing date 11/17/2017

Reviewed on 11/17/2017

Trade name: Glycine (Aminoacetic Acid)

	(Contd. of pag
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.
Transport/Additional information:	
DOT	
Remarks:	Not Regulated
IMDG Remarks:	Not Regulated
· IATA · Remarks:	Not Regulated
UN "Model Regulation":	Not regulated

15 Regulatory information

• 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.
- · TSCA (Toxic Substances Control Act):
- Glycine (Aminoacetic Acid)
- · Proposition 65
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · Precautionary statements
- If swallowed: Call a poison center/doctor if you feel unwell.
- If on skin: Wash with plenty of water.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

(Contd. on page 7)

Printing date 11/17/2017

Reviewed on 11/17/2017

Trade name: Glycine (Aminoacetic Acid)

(Contd. of page 6)

	<mark>nformation</mark> ormation is based on our present knowledge. However, this shall not constitute a guarantee for a
	product features and shall not establish a legally valid contractual relationship.
Departm	ent issuing SDS: Environment protection department.
Contact:	
Date of 1	preparation / last revision
	117: review SDS for accuracy. STN
	date for SDS 10-17-2014. STN
11/17/20	
	tions and acronyms:
	ord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the Internatio
	f Dangerous Goods by Road)
	ernational Maritime Code for Dangerous Goods
	Department of Transportation
	rnational Air Transport Association
	nerican Conference of Governmental Industrial Hygienists
	European Inventory of Existing Commercial Chemical Substances
	nical Abstracts Service (division of the American Chemical Society) tional Fire Protection Association (USA)
	and Fire Froncetion Association (USA)
	al concentration, 50 percent
	hal dose, 50 percent
	stent, Bioaccumulative and Toxic
	Persistent and very Bioaccumulative
-	utional Institute for Occupational Safety
OSHA: Oc	cupational Safety & Health
TLV: Three	shold Limit Value
PEL: Perm	issible Exposure Limit
REL: Reco	mmended Exposure Limit