Printing date 08/07/2024 Reviewed on 08/07/2024

1 Identification

· Product identifier

· Trade name: Nitrogen Standard 2.50 ppm w/w in Naphtha

· Article number: SH123

· 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 shermann@aquasolutions.org

· Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666



2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Toxic to Reproduction 2 Aspiration Hazard 1 H361 Suspected of damaging fertility or the unborn child. H304 May be fatal if swallowed and enters airways.



Skin Irritation 2

H315 Causes skin irritation.

Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

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







GHS02

GHS07

GHS08

- · Signal word Danger
- $\cdot \textit{Hazard-determining components of labeling:}$

Solvent naphtha (petroleum), light aliph.

· Hazard statements

Highly flammable liquid and vapor.

(Contd. on page 2)

Printing date 08/07/2024 Reviewed on 08/07/2024

Trade name: Nitrogen Standard 2.50 ppm w/w in Naphtha

(Contd. of page 1)

Causes skin irritation.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

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



Health = 1Fire = 4Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Fire = 4

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

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

(Contd. on page 3)

Printing date 08/07/2024 Reviewed on 08/07/2024

Trade name: Nitrogen Standard 2.50 ppm w/w in Naphtha

	(Contd. of page 2)
· Dangerous components:	
CAS: 64742-89-8 Solvent naphtha (petroleum), light aliph.	99.999%
· Table of Nonhazardous Ingredients	
CAS: 110-86-1 Pyridine	0.001%

4 First-aid measures

- · Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eve contact: Rinse opened eye for several minutes under running water.
- · 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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 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
- Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· 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

Trotective Action Criteria for Chemicals	
· PAC-1:	
CAS: 110-86-1 Pyridine	3 ррт
· PAC-2:	
CAS: 110-86-1 Pyridine	19 ppm
	(Contd. on page 4)

Printing date 08/07/2024 Reviewed on 08/07/2024

Trade name: Nitrogen Standard 2.50 ppm w/w in Naphtha

(Contd. of page 3)

· *PAC-3*:

CAS: 110-86-1 Pyridine

3600* ppm

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 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 section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

CAS: 64742-89-8 Solvent naphtha (petroleum), light aliph.

TLV Long-term value: 100 ppm

Skin, A3

- · 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.

Store protective clothing separately.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

Printing date 08/07/2024 Reviewed on 08/07/2024

Trade name: Nitrogen Standard 2.50 ppm w/w in Naphtha

Contd. of page 4)

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· 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

· Body protection: Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties · General Information	
· Appearance:	
Form:	Liquid
Color:	Clear
· Odor:	Petroleum-like
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	36 °C (96.8 °F)
· Flash point:	<23 °C (<73.4 °F)
· Flammability (solid, gaseous):	Highly flammable.
· Decomposition temperature:	Not determined.
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.

(Contd. on page 6)

Printing date 08/07/2024 Reviewed on 08/07/2024

Trade name: Nitrogen Standard 2.50 ppm w/w in Naphtha

		(Contd. of page
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wa	tter): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	100.0 %	
VOC content:	100.00 %	
	1,000.0 g/l / 8.35 lb/gal	
Solids content:	0.0 %	
· 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.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
CAS: 110-86-1 Pyridine	2B
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

(Contd. on page 7)

Printing date 08/07/2024 Reviewed on 08/07/2024

Trade name: Nitrogen Standard 2.50 ppm w/w in Naphtha

(Contd. of page 6)

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 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- · 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.

-1/1	Tranc	nort In	towna	TON
		port in		******

· UN-Number · DOT, IMDG, IATA	UN1268
· UN proper shipping name · DOT	Petroleum distillates, n.o.s. (Solvent naphtha (petroleum), light aliph.)
· IMDG, IATA	PETROLEUM DISTILLATES, N.O.S. (Solvent naphtha (petroleum), light aliph.)

- · Transport hazard class(es)
- $\cdot DOT$



· Class 3 Flammable liquids

· Label

(Contd. on page 8)

Printing date 08/07/2024 Reviewed on 08/07/2024

Trade name: Nitrogen Standard 2.50 ppm w/w in Naphtha

(Contd. of page 7)

· IMDG, IATA



· Class 3 Flammable liquids

· Label

· Packing group

· DOT, IMDG, IATA

• Environmental hazards: Not applicable.

· Special precautions for user Warning: Flammable liquids

Hazard identification number (Kemler code): 33
 EMS Number: F-E,S-E
 Stowage Category B

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

 $\cdot DOT$

• Quantity limitations On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

 \cdot IMDG

Limited quantities (LQ)
 Excepted quantities (EO)
 Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation": UN 1268 PETROLEUM DISTILLATES, N.O.S. (SOLVENT

NAPHTHA (PETROLEUM), LIGHT ALIPH.), 3, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

· Section 355 (extremely nazaraous substances)	355 (extremely hazardous substances):
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None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

CAS: 110-86-1 Pyridine

· TSCA (Toxic Substances Control Act):

Solvent naphtha (petroleum), light aliph.

ACTIVE

Pyridine

ACTIVE

· Hazardous Air Pollutants

None of the ingredients is listed.

(Contd. on page 9)

Printing date 08/07/2024 Reviewed on 08/07/2024

Trade name: Nitrogen Standard 2.50 ppm w/w in Naphtha

(Contd. of page 8)

· Proposition 65

· Chemicals known to cause cancer:

CAS: 110-86-1 Pyridine

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

CAS: 110-86-1 Pyridine

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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







GHS02

2 GHS07

GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

Solvent naphtha (petroleum), light aliph.

· Hazard statements

Highly flammable liquid and vapor.

Causes skin irritation.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

(Contd. on page 10)

Printing date 08/07/2024 Reviewed on 08/07/2024

Trade name: Nitrogen Standard 2.50 ppm w/w in Naphtha

(Contd. of page 9)

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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: Environment protection department.
- · Contact:

Date of Preparation / Last Revision:

· Date of preparation / last revision

Revision 0.0, 08-07-2024: Creation date for SDS. CMC/STN 08/07/2024 / -

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified 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)

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

Flammable Liquids 2: Flammable liquids – Category 2

Skin Irritation 2: Skin corrosion/irritation – Category 2

Toxic to Reproduction 2: Reproductive toxicity – Category 2

 $Specific\ Target\ Organ\ Toxicity\ -\ Single\ Exposure\ 3:\ Specific\ target\ organ\ toxicity\ (single\ exposure)\ -\ Category\ 3$

Aspiration Hazard 1: Aspiration hazard – Category 1

US