Printing date 05/22/2024 Reviewed on 05/22/2024

1 Identification

· Product identifier

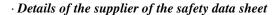
· Trade name: Naphthalene, 99+%

· Article number: N2100

• **CAS Number:** 91-20-3

· EC number:

202-049-5 • Index number: 601-052-00-2



· Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536

USA

800-256-2586

· Information department:

Technical Coordinator

 $Sherman\ Nelson\ shermann@aqua solutions.org$

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

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flammable Solids 1 H228 Flammable solid.



GHS08 Health hazard

Carcinogenicity 2 H351 Suspected of causing cancer.



GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed.

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







GHS02

GHS07

GHS08

· Signal word Danger



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· Hazard statements

Flammable solid.

Harmful if swallowed.

Suspected of causing cancer.

· 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.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

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

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

IF exposed or concerned: Get medical advice/attention.

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

Store locked up.

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

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



Health = 2

Fire = 2Reactivity = 0

· HMIS-ratings (scale 0 - 4)



2 Health = 2

Fire = 2

REACTIVITY 0 Reactivity = 0

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

3 Composition/information on ingredients

· Chemical characterization: Substances

· CAS No. Description

CAS: 91-20-3 Naphthalene

- · Identification number(s) · EC number: 202-049-5
- · Index number: 601-052-00-2

4 First-aid measures

- · Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation: Supply fresh air; consult doctor in case of complaints.

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(Contd. of page 2)

- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: Immediately call a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot \textit{Indication of any immediate medical attention and special treatment needed}$

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.
- · 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:

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
- · PAC-1: 15 ppm
- · PAC-2: 83 ppm
- · PAC-3: 500 ppm

7 Handling and storage

- · Handling:
- Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · 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 section 7.

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· Control parameters

· Components with limit values that require monitoring at the workplace:

CAS: 91-20-3 Naphthalene

PEL Long-term value: 50 mg/m³, 10 ppm REL Short-term value: 75 mg/m³, 15 ppm Long-term value: 50 mg/m³, 10 ppm

TLV Long-term value: 10 ppm

Skin; BEI, A3

· Ingredients with biological limit values:

CAS: 91-20-3 Naphthalene

BEI -

LD50 Intraperitoneal: -

Time: end of shift

LD50: 1-Naphthol with hydrolysis + 2-Naphthol with hydrolysis (Nq,Ns)

- · 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.

Wash hands before breaks and at the end of work.

- · Breathing equipment: Not required.
- · Protection of hands:

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: Flakes Color: White

Odor: Moth ball odor
 Odor threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range: $80 \, ^{\circ}C \, (176 \, ^{\circ}F)$ Boiling point/Boiling range: $218 \, ^{\circ}C \, (424.4 \, ^{\circ}F)$

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Trade name: Naphthalene, 99+%

		(Contd. of page
· Flash point:	80 °C (176 °F)	
· Flammability (solid, gaseous):	Product is not flammable.	
· Auto igniting:	540 °C (1,004 °F)	
· Decomposition temperature:	Not determined.	
· Ignition temperature:	Not determined.	
· Danger of explosion:	Not determined.	
· Explosion limits:		
Lower:	0.9 Vol %	
Upper:	5.9 Vol %	
· Vapor pressure at 20 °C (68 °F):	0.04 hPa (0 mm Hg)	
· Density at 20 °C (68 °F):	1.14 g/cm³ (9.5133 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water at 20 °C (68 °F):	0.03 g/l	
· Partition coefficient (n-octanol/wate	e r): 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 500 mg/kg (ATE)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.

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- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) 2B
- · NTP (National Toxicology Program) R
- · 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 3 (Assessment by list): 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.

14 Transport information		
· UN-Number		
· DOT, IMDG, IATA	UN1334	
· UN proper shipping name		
$\cdot DOT$	Naphthalene, crude	
· IMDG	NAPHTHALENE, CRUDE, MARINE POLLUTANT	
· IATA	NAPHTHALENE, CRUDE	

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Trade name: Naphthalene, 99+%

(Contd. of page 6) · Transport hazard class(es) $\cdot DOT$ · Class 4.1 Flammable solids, self-reactive substances and solid desensitised explosives · Label 4.1 · IMDG · Class 4.1 Flammable solids, self-reactive substances and solid desensitised explosives · Label 4.1 \cdot IATA 4.1 Flammable solids, self-reactive substances and solid · Class desensitised explosives · Label 4.1 · Packing group · DOT, IMDG, IATA Environmentally hazardous substance, solid; Marine Pollutant · Environmental hazards: · Marine pollutant: Symbol (fish and tree) · Special precautions for user Warning: Flammable solids, self-reactive substances and solid desensitised explosives · Hazard identification number (Kemler code): 40 · EMS Number: F-A,S-G· Stowage Category · Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. · Transport in bulk according to Annex II of Not applicable. MARPOL73/78 and the IBC Code · Transport/Additional information: $\cdot DOT$ · Quantity limitations On passenger aircraft/rail: 25 kg On cargo aircraft only: 100 kg · Hazardous substance: 100 lbs, 45.4 kg

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· IMDG

Limited quantities (LQ)
Excepted quantities (EQ)
Code: E1

Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g

· UN "Model Regulation": UN 1334 NAPHTHALENE, CRUDE, 4.1, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara
- · Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is listed.
- · TSCA (Toxic Substances Control Act): ACTIVE
- · Hazardous Air Pollutants Substance is listed.
- · Proposition 65
- · Chemicals known to cause cancer: Substance is 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) C, CBD
- · TLV (Threshold Limit Value) A4
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07



GHS02

...

· Signal word Danger

· Hazard statements Flammable solid.

Harmful if swallowed.

Suspected of causing cancer.

· 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.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

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

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

IF exposed or concerned: Get medical advice/attention.

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

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Trade name: Naphthalene, 99+%

(Contd. of page 8)

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 1.2, 05/22/2024: Reviewed SDS for accuracy. MH/STN 05/22/2024

· 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 CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

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

BEI: Biological Exposure Limit

Flammable Solids 1: Flammable solids – Category 1 Acute Toxicity - Oral 4: Acute toxicity – Category 4 Carcinogenicity 2: Carcinogenicity – Category 2

· * Data compared to the previous version altered.

US