Printing date 06/26/2019 Reviewed on 06/26/2019

1 Identification

· Product identifier

· Trade name: PNP Mobile Phase 42%

(0.2 um Filtered)

· Article number: DOW091

· 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



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

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





GHS02

GHS08

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

Methanol (Methyl Alcohol)

· Hazard statements

Highly flammable liquid and vapor.

Causes damage to organs.

· Precautionary statements

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

Keep container tightly closed.

Ground/bond container and receiving equipment.

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

Use only non-sparking tools.

(Contd. on page 2)

Printing date 06/26/2019 Reviewed on 06/26/2019

Trade name: PNP Mobile Phase 42% (0.2 um Filtered)

(Contd. of page 1)

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

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

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

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

IF exposed: Call a POISON CENTER or doctor/physician.

Specific treatment (see on this label).

In case of fire: Use for extinction: CO2, powder or water spray.

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 = 1 Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 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.

· Dangerous components:				
CAS: 67-56-1 Methanol (Methyl Alcohol)				
· Table of Nonhazardous Ingredients				
CAS: 631-61-8	Ammonium Acetate	0.0066%		
CAS: 7732-18-5	Water	63.562%		

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · 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.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)

Printing date 06/26/2019 Reviewed on 06/26/2019

Trade name: PNP Mobile Phase 42% (0.2 um Filtered)

(Contd. of page 2)

· 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

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Dilute with plenty of water.

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 item 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:				
CAS: 67-56-1 Methanol (Methyl Alcohol)		530 ppm		
CAS: 631-61-8	CAS: 631-61-8 Ammonium Acetate			
· PAC-2:				
CAS: 67-56-1 Methanol (Methyl Alcohol)		2,100 ppm		
CAS: 631-61-8 Ammonium Acetate		42 mg/m^3		
· PAC-3:				
CAS: 67-56-1	Methanol (Methyl Alcohol)	7200* ppm		
CAS: 631-61-8	Ammonium Acetate	250 mg/m^3		

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

(Contd. on page 4)

Printing date 06/26/2019 Reviewed on 06/26/2019

Trade name: PNP Mobile Phase 42% (0.2 um Filtered)

(Contd. of page 3)

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

CAS: 67-56-1 Methanol (Methyl Alcohol)

PEL Long-term value: 260 mg/m³, 200 ppm REL Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm

Skin

TLV Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm

Skin; BEI

· Ingredients with biological limit values:

CAS: 67-56-1 Methanol (Methyl Alcohol)

BEI 15 mg/L

LD50 Intraperitoneal: urine

Time: end of shift

LD50: Methanol (background, nonspecific)

- · 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.

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

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.

(Contd. on page 5)

Printing date 06/26/2019 Reviewed on 06/26/2019

Trade name: PNP Mobile Phase 42% (0.2 um Filtered)

(Contd. of page 4)

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	ana	cnemical	properties

· Information on basic physical and chemical properties	$\cdot I$	nformation	on basic	physical	and ch	emical	properties
---	-----------	------------	----------	----------	--------	--------	------------

· General Information

· Appearance:

Form: Liquid
Color: Clear
Odor: Alcohol

· Odor threshold: Not determined.
· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 64.4 °C (147.9 °F)

• Flash point: $11 \,^{\circ}C \, (51.8 \,^{\circ}F)$

· Flammability (solid, gaseous): Not applicable.

• Ignition temperature: $455 \, ^{\circ}C \, (851 \, ^{\circ}F)$

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

• Danger of explosion: Product is not explosive. However, formation of explosive air/vapor

mixtures are possible.

· Explosion limits:

 Lower:
 5.5 Vol %

 Upper:
 44 Vol %

• Vapor pressure at 20 °C (68 °F): 128 hPa (96 mm Hg)

• Density at 20 °C (68 °F): 0.92405 g/cm³ (7.7112 lbs/gal)

Relative density
Vapor density
Evaporation rate
Not determined.
Not determined.
Not determined.

(Contd. on page 6)

Printing date 06/26/2019 Reviewed on 06/26/2019

Trade name: PNP Mobile Phase 42% (0.2 um Filtered)

		(Contd. of page
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octan	ol/water): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	36.4 %	
Water:	63.6 %	
VOC content:	36.43 %	
	336.6 g/l / 2.81 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:

· LD/LC50 values that are relevant for classification:			
ATE (Acute Toxicity Estimate)			
Oral	LD50	3,258-7,601 mg/kg (rat)	
Inhalative	LC50/4h	352 mg/l (rat)	

CAS: 67-56-1 Methanol (Methyl Alcohol)				
	LD50	100 mg/kg (ATE)		
	LD50	300 mg/kg (ATE)		
Inhalative	LC50/4h	3 mg/l (ATE)		

- Primary irritant effect:
- · on the skin: No irritant effect.
- · 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:

(Contd. on page 7)

- 110

Printing date 06/26/2019 Reviewed on 06/26/2019

Trade name: PNP Mobile Phase 42% (0.2 um Filtered)

(Contd. of page 6)

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is 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 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even 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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number

· DOT, IMDG, IATA UN1993

· UN proper shipping name

· **DOT** Flammable liquids, n.o.s. (Methanol)

· IMDG, IATA FLAMMABLE LIQUID, N.O.S. (METHANOL)

(Contd. on page 8)

Printing date 06/26/2019 Reviewed on 06/26/2019

Trade name: PNP Mobile Phase 42%

(0.2 um Filtered)

(Contd. of page 7)

· Transport hazard class(es)

 $\cdot DOT$



· Class 3 Flammable liquids

· Label

· IMDG, IATA



· Class 3 Flammable liquids

· Label

· Packing group

· DOT, IMDG, IATA

• Environmental hazards: Not applicable.

· Special precautions for user Warning: Flammable liquids

Danger code (Kemler): 336
EMS Number: F-E,S-D
Stowage Category B

· Stowage Code SW2 Clear of living quarters.

· 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: 1 L On cargo aircraft only: 60 L

 \cdot IMDG

Limited quantities (LQ) 1L

· Excepted quantities (EQ) Code: E2

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

· UN ''Model Regulation'': UN 1993 FLAMMABLE LIQUID, N.O.S. (METHANOL), 3, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

(Contd. on page 9)

Printing date 06/26/2019 Reviewed on 06/26/2019

Trade name: PNP Mobile Phase 42% (0.2 um Filtered)

	(Contd. of page 8)			
· Section 313 (Specific toxic chemical listings):				
CAS: 67-56-1 Methanol (Methyl Alcohol)				
· TSCA (Toxic Substances Control Act):				
Methanol (Methyl Alcohol)	ACTIVE			
Ammonium Acetate	ACTIVE			
Water	ACTIVE			
· Hazardous Air Pollutants				
CAS: 67-56-1 Methanol (Methyl Alcohol)				
Proposition 65				
· Chemicals known to cause cancer:				
None of the ingredients is listed.				
· 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:				
CAS: 67-56-1 Methanol (Methyl Alcohol)				
· Carcinogenic categories				
· EPA (Environmental Protection Agency)				
CAS: 631-61-8 Ammonium Acetate	D			
· TLV (Threshold Limit Value established by ACGIH)				
None of the ingredients is listed.				
· 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

GHS08

· Signal word Danger

· Hazard-determining components of labeling:

Methanol (Methyl Alcohol)

· Hazard statements

Highly flammable liquid and vapor.

Causes damage to organs.

· Precautionary statements

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

Keep container tightly closed.

Ground/bond container and receiving equipment.

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

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Printing date 06/26/2019 Reviewed on 06/26/2019

Trade name: PNP Mobile Phase 42% (0.2 um Filtered)

(Contd. of page 9)

Wash thoroughly after handling.

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

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

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

IF exposed: Call a POISON CENTER or doctor/physician.

Specific treatment (see on this label).

In case of fire: Use for extinction: CO2, powder or water spray.

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

Revsion 0.0, 06-26-2019, Creation date for SDS. STN 06/26/2019 / -

· Abbreviations and acronyms:

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

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) 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

 $Flam.\ Liq.\ 2:\ Flammable\ liquids-Category\ 2$

STOT SE 1: Specific target organ toxicity (single exposure) - Category 1