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1 Identification

· Product identifier

· Trade name: Ultra Low Sulfur Diesel

(CSP)

· Article number: LY363

· 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



GHS08 Health hazard

Muta. 1A H340 May cause genetic defects. Carc. 2 H351 Suspected of causing cancer.

Flam. Liq. 4 H227 Combustible liquid.

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



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

Fuels, diesel

Biphenyl

Naphthalene

· Hazard statements

Combustible liquid.

May cause genetic defects.

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 flames and hot surfaces. – No smoking.

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

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IF exposed or concerned: Get medical advice/attention.

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 = 2Fire = 2Reactivity = 0

· HMIS-ratings (scale 0 - 4)



2 Health = 2Fire = 2Reactivity = 0

- · 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: 68334-30-5	Fuels, diesel	90.0%	
CAS: 91-20-3	Naphthalene	3.0%	
CAS: 92-52-4	Biphenyl	1.5%	
· Table of Nonhazardous Ingredients			
CAS: 2551-13-7 i	rimethyl benzene	1.5%	

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · 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: 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.

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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:

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: 68334-30-5	Fuels, diesel	300 mg/m³	
CAS: 91-20-3	Naphthalene	15 ppm	
CAS: 92-52-4	Biphenyl	0.87 ppm	
· PAC-2:	· PAC-2:		
CAS: 68334-30-5	Fuels, diesel	$3,300 \text{ mg/m}^3$	
CAS: 91-20-3	Naphthalene	83 ppm	
CAS: 92-52-4	Biphenyl	9.6 ppm	
· PAC-3:	· PAC-3:		
CAS: 68334-30-5	Fuels, diesel	$20,000 \ mg/m^3$	
CAS: 91-20-3	Naphthalene	500 ppm	
CAS: 92-52-4	Biphenyl	300 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.

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 \cdot *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: 68334-30-5 Fuels, diesel

TLV Long-term value: 100* mg/m³

as total hydrocarbons; Skin; *inh. fraction + vapor

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: 52 mg/m³, 10 ppm

Skin; BEI

CAS: 92-52-4 Biphenyl

PEL Long-term value: 1 mg/m³, 0.2 ppm

REL Long-term value: 1 mg/m³, 0.2 ppm

TLV Long-term value: 1.3 mg/m³, 0.2 ppm

- · 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. 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: Goggles recommended during refilling.
- · Body protection: Protective work clothing

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T. C			
Information on basic physical and chemical properties General Information Appearance:			
			Form:
Color:	Clear, colorless to light amber		
Odor:	Characteristic		
Odor threshold:	Not determined.		
pH-value:	Not determined.		
Change in condition			
Melting point/Melting range:	Undetermined.		
Boiling point/Boiling range:	Undetermined.		
Flash point:	>60 °C (>140 °F)		
Flammability (solid, gaseous):	Not applicable.		
Ignition temperature:			
Decomposition temperature:	Not determined.		
Auto igniting:	Product is not selfigniting.		
Danger of explosion:	Not determined.		
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.		
Solubility in / Miscibility with			
Water:	Not miscible or difficult to mix.		
Partition coefficient (n-octanol/wat	t er): Not determined.		
Viscosity:			
Dynamic:	Not determined.		
Kinematic at 40 °C (104 °F):	5 mm ² /s		
Solvent content:			
VOC content:	0.00 %		
	0.0 g/l / 0.00 lb/gl		
Solids content:	4.5 %		
Other information	No further relevant information available.		

10 Stability and reactivity

- $\cdot \textit{Reactivity No further relevant information available}.$
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

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- · 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/LC	· LD/LC50 values that are relevant for classification:	
ATE (Acute Toxicity Estimate)		<u> </u>
Oral	LD50	14,655 mg/kg (rat)
Derma	l LD50	166,667 mg/kg (rat)

CAS: 91-20-3 Naphthalene

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.
- · Additional toxicological information:

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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)			
CAS: 68334-30-5	Fuels, diesel	2B	
CAS: 91-20-3	Naphthalene	2 <i>B</i>	
· NTP (National Toxicology Program)			
CAS: 91-20-3 Naphthalene			
· 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.

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 $\cdot \textit{Other adverse effects} \ \textit{No further relevant information available}.$

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.

· UN-Number	
· DOT	NA1993
· IMDG, IATA	UN1993
· UN proper shipping name	
$\cdot DOT$	COMBUSTIBLE LIQUID, N.O.S (Fuels, diesel)
· IMDG	FLAMMABLE LIQUID, N.O.S. (Fuels, diesel, NAPHTHALE
	CRUDE, Biphenyl), MARINE POLLUTANT
· IATA	FLAMMABLE LIQUID, N.O.S. (Fuels, diesel)
· Transport hazard class(es)	
· DOT	
COMBUSTIBLE	
· Class	3 Combustible liquids
· IMDG	
· Class	9 Miscellaneous dangerous substances and articles
· Label	9
· IATA	
· Class	9 Miscellaneous dangerous substances and articles
· Label	9
· Packing group	
· DOT, IMDG, IATA	III
· Environmental hazards:	Product contains environmentally hazardous substant Naphthalene

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· Marine pollutant:	Symbol (fish and tree)
 Special precautions for user Danger code (Kemler): EMS Number: Stowage Category 	Warning: Miscellaneous dangerous substances and articles 90 F-E, <u>S-E</u> A
· Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable.
· Transport/Additional information:	
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN ''Model Regulation'':	UN 1993 FLAMMABLE LIQUIDS, N.O.S. (FUELS, DIESEL), 9, III

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.

· Section 313 (Specific toxic chemical listings):

CAS: 91-20-3 Naphthalene

CAS: 92-52-4 Biphenyl

· TSCA (Toxic Substances Control Act):

Fuels, diesel Naphthalene

Biphenyl

- · TSCA new (21st Century Act) (Substances not listed)
- · Proposition 65
- · Chemicals known to cause cancer:

CAS: 91-20-3 Naphthalene

· 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)			
	CAS: 91-20-3	Naphthalene	C, CBD
	CAS: 92-52-4	Biphenyl	SC

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· TLV (Threshold Limit Value established by ACGIH)		
CAS: 68334-30-5	Fuels, diesel	A3
CAS: 91-20-3	Naphthalene	A4
· NIOSH-Ca (National Institute for Occupational Safety and Health)		

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



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

Fuels, diesel

Biphenyl

Naphthalene

· Hazard statements

Combustible liquid.

May cause genetic defects.

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 flames and hot surfaces. – No smoking.

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

IF exposed or concerned: Get medical advice/attention.

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

11-30-2017: review SDS for accuracy. STN

Creation date for SDS 12-11-2015. STN

11/30/2017 / -

· 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

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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

Flam. Liq. 4: Flammable liquids – Category 4 Muta. 1A: Germ cell mutagenicity – Category 1A

Carc. 2: Carcinogenicity – Category 2

US